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E.K.S.

THE

MEDICAL EXAMINER,

AND

RECORD OF MEDICAL SCIENCE.

EDITED BY

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VOL. III.—NEW SERIES.

PHILADELPHIA:
LINDSAY & BLAKISTON,
N. W. CORNER OF FOURTH AND CHESNUT.
1847.

MERRIHEW & THOMPSON, Printers,
7 Carter's Alley, Philada.

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☞ In the Notice of Dr. WATSON's lecture, page ninety-six, fourteenth line from the top, for "second *class*" read second *course*.

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Remarks on the Urinometer. By W. S. W. Ruschenberger, M. D., U. S. N.

U. S. Naval Hospital,
New York, December 5th, 1846.

My Dear Sir,—Those members of the profession who may be engaged in investigating the changes induced in the constitution of urine by disease, may be led into error by using a gravimeter or urinometer, manufactured in Philadelphia, and known as Prout's, for ascertaining the specific gravity of the fluid. The instrument to which I allude consists of a copper ball, surmounted by a graduated stem of box-wood, balanced below by a brass wire and pea. The point at which the stem floats in distilled water is marked at zero, and the point at which it stands in a saturated solution of common salt, forms the opposite extremity of the scale, the interval being divided into sixty degrees.

If placed gently in a fluid under examination it will stand, say for illustration at 30°, but immerse the instrument entirely, so as to completely wet the stem, it will rise and fall, and become quiescent at 20°. I have repeated the experiment very frequently with the same result, in the same fluid, after wiping the stem dry, and in different fluids. I have also compared the specific gravity of fluids ascertained by this gravimeter, with the specific gravity of the same fluids ascertained by an accurately made specific gravity bottle, and found the result different in every instance, and without any corresponding ratio of difference.

Supposing it possible that the error might be confined to the particular instrument in my possession, I submitted it to the manufacturer for adjustment, and took the opportunity to compare it with four other instruments then on sale in his shop. We found that no two of the five instruments corresponded in their respective indications of specific gravity; and further, that every instrument varied from 6 to 10 degrees in its indication of specific gravity, according as it was gently permitted to subside into the fluid, or entirely immersed so as to wet the whole stem or scale. The price of the instrument with the case is seven dollars; its value for practical purposes is not a cent. The indications by it are too uncertain and too irregular to be even proximative to accuracy.

This instrument was exhibited at the fair of the Franklin Institute in 1845, but whether it received approval or not I do not remember. The objections to it might possibly be removed, if, instead of box-wood, metal were used for the gratuated scale or stem of the instrument.

The hydrometers of Beaumé and Gay Lussac are almost equally fallacious. After very numerous experiments the conclusion arrived at is, that the only true way of arriving at the specific gravity of urine or other fluid, is by means of the thousand-grain bottle and counterpoise.

If you consider the above information of any interest, it may be worth a place in the "Medical Examiner."

Very respectfully,
W. S. W. RUSCHENBERGER.

PROFESSOR R. M. HUSTON, *Philadelphia.*

Three cases of presentation of the Face to the Sacrum, successfully treated without turning. By T. VAN VALZAH, M.D., of Mifflinburg, Pennsylvania.

Mrs. Shively, on the 12th day of February, 1828, sent for me in great haste, on account of a very profuse hemorrhage. When I entered the room, I found her lying on her back near the bedside. With as little delay as possible I made an examination, and found the face low in the hollow of the sacrum. Under these unfavourable circumstances, according to the directions of Dr. Dewees, I determined on turning and delivering by the feet. So without changing her position, I directed an assistant to support her left knee, and supporting the right one myself, I introduced my right hand into the vagina, and placing two fingers on each side of the nose, having the forehead in the hol-

low of my hand, I raised the whole head up out of the pelvis, and as it became disengaged, by a very little traction with the points of my fingers, the chin fell back towards the sternum, and fortunately at that instant the uterus began to contract with great force. The head being now in the first position I withdrew my hand as it advanced, and the whole cranium was born with the same pain, and the body with the next. The placenta was thrown off in about fifteen or twenty minutes. The mother and child both did well.

April 13th, 1842. Mrs. Beckley, residing in Mifflinburg, sent for me in the evening. On examination I found the face coming down with the chin in the hollow of the sacrum, the os uteri but partially dilated. Encouraged by my success in the treatment of the former case, I now awaited the dilating process very attentively for about two hours, when it became sufficiently great to operate. I then had my patient placed on her back near the bed stock, and directing an assistant to support the left knee, while I supported the right myself, I introduced my hand into the vagina, placing two fingers on each side of the nose, having the forehead in the hollow of my hand, I disengaged the head from the pelvis by raising it up, at the same time directing the chin towards the sternum. The head being now in the first position, I withdrew my hand as it advanced. The labour progressed speedily and safely. The mother and child both did well.

April 21st, 1842. Mrs. Kleckner, about to be confined the eighth or ninth time, sent for me in the afternoon. On making an examination, "per vaginam," I found this also to be a face presentation, and in every respect similar to that of Mrs. Beckley, which occurred but eight days before. It is sufficient to say that I treated this case precisely as I did Mrs. Beckley. Mother and child are both living and well at this time.

Case of Retention of Fœtal Bones in the Uterus during four years. Communicated in a letter to the Editor, by JAMES B. ELLIS, M.D., of Ripley, Miss.

On the 29th of January, 1846, I was called by Dr. James Thompson, to see Mrs. Mary Ann Fields, about 25 miles distant from this place, aged 27 years, who gave me the following account of her case:

In Cass county, Georgia, early in April, 1842, she was confined at full time in her first pregnancy; her labour was very lingering, and the physician she sent for advised her to trust to the powers of nature, and left her. Her pains soon after ceased. At the time, she

was unable to rise from her bed, and she therefore sent for two other medical gentlemen, and requested them to assist her. They told her that her pains would very probably return again, and all would terminate well. Her pains, however, did not return, and in about four months after, the decomposed flesh of the child commenced passing off rapidly, per vaginam; she said the fetor was insupportable to her friends, so much so that visiters could scarcely come into her room. In about six months from her confinement to bed, the discharges ceased, and her health began to improve rapidly.

From this time her menstrual discharges returned, and continued regular in time, quantity and consistence, for more than three years. During this period there was a tumour in the epigastrium, that always gave a dull pain on pressure. Her disposition was cheerful, and continued as good as usual during this time. She consulted every medical gentleman that she could conveniently, but none agreed with her that the bones of the fœtus remained in the uterus. One expressed it as his opinion that the case was one of extra uterine conception. This, however, could hardly have been so, for she says the putrid flesh passed away rapidly per vaginam. About the middle of the summer of 1845 she was taken with typhoid fever, a disease that prevailed very generally in this section of country at that time. During the existence of her illness, there was considerable pain developed in the tumour spoken of, and she expressed to her attending physician her confident belief that the bones of her child were still in the uterus, and requested him to endeavour to extract them, but she said he only laughed at her and told her such a thing was impossible. After the abatement of her fever, her physician discontinued his visits, but she was still unable to walk from the violence of the pains in the uterus. During the succeeding winter, my friend Dr. James Thompson was called to see her. He found the tumour very large and painful, and the os uteri hard, and apparently sealed, and her general health very bad. He commenced treating her case on general principles, giving her tonics, alterants, anodynes, hip baths, etc. During the time I was occasionally consulted by him with reference to her case. A few days before I was first called to see her, she passed several very hard rough substances per rectum, which on examination were found to be bones. In a day or two she passed 25 or 30 bones, mostly small. At my request, Dr. Black accompanied me to see her, and on examination per rectum, I could distinctly feel a large fistulous opening from the rectum to the uterus, and could tell from her discharges that ulceration was going on rapidly. The ends of some of the long bones passed into the rectum and prevented a free discharge from her bowels, and at every attempt at defecation the bones were borne down against the raw edge of the fistula, which gave her excruciating pain. We had no instruments with us at the time for extracting the bones, having

gone as much for curiosity as any prospect of doing her any good. We mustered up such rude instruments however as we could command on the spot, and requested Dr. Laird to assist us. With these we dilated the rectum, and with a pair of long curved forceps extracted the projecting bones. The operation was so very painful, the whole mucous membrane of the rectum being ulcerated, that she utterly refused to suffer any attempts at further efforts. She said she knew she would die, and would not suffer any pain that she could avoid.

We recommended Dr. Thompson to use anodyne mucilaginous enemas, pulv. charcoal, as a laxative, warm astringent hip baths, and such tonics as she could bear. This treatment she submitted to, although sometimes reluctantly. She continued to pass off bones more or less every day, and sometimes entertained hopes of recovery. At her death, (about the 20th of March, 1846,) Dr. Thompson thought she had discharged nearly all the bones; only a few of the cranium remaining. The fistulous opening was very large at the time of her death. A post mortem examination, I regret to state, could not be obtained. The statements made by Mrs. Fields, of her symptoms and sufferings, are all confirmed by her husband, and I have no doubt of their correctness. Some of the bones are in my possession now, which I will exhibit to you next winter, when I hope to have the pleasure of listening to your lectures again.

I have the honor to be, very respectfully,
Your friend and obedient servant,
JAMES B. ELLIS.

On the Inhalation of Sulphuric Ether. By J. B. FLAGG, M. D. of Philadelphia, Surgeon Dentist.

The medical world is pretty fully advised as to the narcotic influence of this drug, when its vapour is inhaled into the lungs *under peculiar circumstances.*

Desirous of promoting the cause of science, and curious to test its efficacy when applied to painful operations, I have been engaged for several weeks past in experimenting with it, both in its pure washed state, and compounded to a very limited extent with oil of wine; first upon myself, and then upon many friends. I will proceed to give a few remarks as to its legitimate use, and its recent *illegitimate introduction* to the profession of surgery.

The effects of sulphuric ether, when inhaled, have long been known to be similar to those of nitrous oxide; varying, according to idiosyncrasy and to the object in view. If inhaled with a certain degree of doubt as to its capacity to effect, it is most sure to produce a melancholy train of thought for the time being, accompanied

with weeping or other symptoms of distress. If taken with a view to produce merriment, its tendency, in a large proportion of cases, is to induce pleasurable sensations, as evinced by laughter, dancing, grotesque gestures, &c. When taken for the purpose of submitting to an operation, the mind of the patient, having dwelt much upon the ultimate object to be attained, is calmed and trained to that perfect state of inactivity, which allows the operation to proceed with but slight, if any, disposition to resist, on the part of the patient.

The cerebrum, while under its influence, acts from exciting causes, similar to those which occur frequently during natural sleep; that is, *external circumstances will suggest the idea.* Two cases will serve to illustrate:

Miss F., a young lady about 18 years of age, of nervous temperament, had two teeth removed after two minutes inhaling the vapour; she was at first perfectly quiet, opened the mouth at my request, and allowed the instrument (forceps) to be placed upon the tooth; but as it was necessary to force them well under the alveoli, she made considerable resistance, and appeared to suffer much; she screamed loudly, saying, "*stop pulling.*" In less than two minutes after the teeth were removed, and when the effect had entirely passed off, she assured her mother that she had not been in the least hurt. Upon being questioned as to why she manifested so much distress, she replied that her dream was an unpleasant one; that she thought she was on board a vessel, and perceiving that they were going upon the rocks, she called to the man at the helm to "*stop pulling!*" supposing that the vessel was propelled by this means. Now as the words made use of were a natural outcry, I prefer to attribute to *them* the suggestion of the dream, than to marvel at the coincidence.

A young man, æt. 20, was desirous of having a painful *molar* of the lower jaw extracted; his doubts were very great as to the possibility of destroying sensation; but still desired the experiment. For this operation I used the German Key; he manifested considerable pain; carried his hand to the mouth; swayed the body forward and back, as in much agony. I asked if it hurt him much; he said, "*indeed it did.*" I then requested him to tell me if the tooth was out; he said, "*no.*" Here I made the remark that it was a humbug; he immediately replied that "*it was a humbug*"—that "he did not believe it could be done"—"expected to be imposed upon when he came." At this point he recovered consciousness; smiled when I showed him his tooth; assured me that he suffered *no pain whatever.* Upon my asking him why he called it a humbug, he denied having said so; clearly illustrating that his ideas for the moment were dictated by my method of treating the matter.

From various experiments, I am satisfied that it is by no means necessary to produce *entire unconsciousness*, in order to act suf-

ficiently upon the sensorium to allow of any operation being performed, of not more than two or three minutes duration. Several recent cases have been so treated by me that my patients were perfectly aware of their position; having a full knowledge of every process in the operation; and expressing themselves, invariably, as much delighted with the result; one stating that "*it felt like extracting the tooth from a block of wood.*"

The medical properties and uses of sulphuric ether are well described in Wood and Bache's Dispensatory, page 810: "A powerful diffusible stimulant, though transient in its operation." "It is also esteemed anti-spasmodic and narcotic." "Its vapour, when breathed, produces a transient intoxication, resembling that caused by respiring *nitrous oxide*, but dangerous if carried too far" "It is beneficial in some stages of low fevers; likewise good in nervous headache, unattended with *vascular fulness*—some stages of hysteria; and generally in nervous and painful diseases, which are unaccompanied by inflammation." "In catarrhal dyspnœa and spasmodic asthma, its vapour may be inhaled with advantage. In nausea it is given as a cordial; likewise in cramp in the stomach, &c.

From this abbreviated quotation from the above-mentioned work, it will be seen that the medicinal virtues of the article under consideration, have been well understood by the profession for a long time; and that it is esteemed an agent of so much potency, as to be used with much caution, even by the faculty; hence I am at a loss to comprehend the validity of a certificate, emanating from the hands of *one* quack authorising another of similar pretensions to administer it under any circumstances whatever. And should any accident occur in this view of the case, I trust that the *medical* and *legal* world will know how to discriminate.

I would not be understood as speaking lightly of all those gentlemen engaged in the dental art, who may not be provided with medical diplomas. There are many such, whose work show them to be highly deserving of public confidence; and it is my belief that all who may be desirous of employing this agent, will be so led in their studies, physiological and pathological, that they will sooner or later demand and receive such testimonials as must serve to elevate our much abused and down-trodden profession.

It is much to be hoped that some attention may be bestowed upon this subject by our medical colleges: suffering humanity demands that the whole question be properly investigated and put upon such a footing as will secure to the community what Dr. Bigelow, in his article of the 18th Nov., Boston Med. and Surg. Journal, seems so desirous of accomplishing—A SUITABLE GUARANTEE AGAINST ITS ABUSE.

BIBLIOGRAPHICAL NOTICES.

Julii Vogel Icones Histologiæ Pathologicæ Tabulæ Histologiam Pathologicam illustrantes viginti sex tabulæ, continentes ccxci figuras, quarum cclxx ad naturam delineatæ sunt. Lipsiæ, 1843.

Erlauterungstafeln zur Pathologischen Histologie mit vorzüglicher Rucksicht auf sein Handbuch der pathologischen Anatomie herausgegeben von [Dr. JULIUS VOGEL, ausserordentl. Professor der Medizin in Göttingen. Sechs und zwanzig Tafeln, mit 291 Figuren, wovon 270 nach der Natur gezeichnet sind. 4to. pp. 128. Leipzig, 1843.

The Pathological Anatomy of the Human Body. By JULIUS VOGEL, M. D. Professor of Clinical Medicine at the University of Giessen. Translated from the German, with additions By GEORGE E. DAY, M. A. and L. M. Cantab. Member of the Royal College of Physicians: Physician to the Western General Dispensary; Lecturer on Histology and Animal Chemistry at the Middlesex Hospital Medical School; Member of the Pathological Society of London, and formerly Senior President of the Royal Medical Society of Edinburgh. Illustrated by upwards of one hundred plain and coloured Engravings. 8vo. pp. 587. London, 1847.

In the last volume of the Examiner, (p. 239,) we heralded the advent of the "Icones" of Vogel—the first work on histological pathology that had been issued. The "Pathological Anatomy of the Human Body" by the same author, of which we have before us the translation by Dr. Day, is illustrated by plates taken from the "Icones;" and is, as the translator remarks—or rather implies—the only work in the language that embraces the recent discoveries effected by chemistry and the microscope. It is a treatise on general pathological anatomy; and, we are told, will very shortly be followed by another, devoted to the consideration of pathological changes affecting special organs.

The work consists of an Introduction treating of the relations

of pathological anatomy to the other departments of medical science; and of ten chapters, which consider—I. The abnormal development of gaseous matters—Pneumatoses. II. Abnormal collections of aqueous fluids—Dropsies. III. Pathological relations of the blood. IV. The general relations of pathological epigeneses, [new formations.] V. Special relations of pathological epigeneses. VI. Pathological changes in the physical properties of the tissues and organs of the body. VII. Combinations of morbid elementary changes. VIII. Independent organisms in the human body—Parasites. IX. Congenital modifications of the human body—Malformations. And X. Changes occurring in the body after death—Post-mortem changes.

It is obviously impossible for us, in the space we can assign to this notice, to examine into the views of the author on all these important subjects; but we may refer to a few. Under Pneumatoses he properly remarks, that gas may be developed in the human body partly from food in the act of decomposition in the intestinal canal, and partly from the decomposition of the constituents of the body itself. He has no doubt, too,—nor have we,—that it may be actually secreted by different parts of the frame.

"Thus, Magendie and Girardin assert, that on confining a portion of the intestine of a live dog between two ligatures, in the course of some hours the included portion was found full of air, which escaped with a hissing sound on making an incision.* In the intestinal canal of swine we sometimes meet with considerable accumulations of gas between the layers forming the walls of the bowels. Sir Francis Smith† has described an interesting case of the development of gas in man, which deserves a full notice. He states—"On the 12th of May, 1840, I was consulted by a gentleman, who told me that he often suffered from an enormous development of gas in the stomach, which he discharged by eructation: that he likewise, occasionally, experienced a development of gas from the bladder, and that his skin acted in a similar manner, as he had observed in the bath. On the morning of the 15th, I found my patient in a bath at 79° F.

* Magendie et Girardin; Recherches physiolog. sur les gaz intestin. Paris, 1824. p. 24; Lobstein, Path. Anat. Vol. 1, p. 138.

† Dublin Med. Journal, January, 1841. p. 454.

His breast, shoulders, abdomen, and hands, were literally covered with minute bubbles of gas. On being questioned, the attendant at the bath stated that he had never previously witnessed anything of the kind. On removing the hands and arms from the water, the air bubbles disappeared, but gradually returned on again immersing those organs. The bubbles were of the size of a pin's head. On wiping them off, they disappeared, but gradually formed again.

"In opposition to the above observations of Magendie and Girardin, it may be urged that the gas which was developed might probably have arisen from the decomposition of remnants of food in the inclosed portion of intestine, or that the portion of gut becoming distended by peristaltic motion had imbibed air from the peritoneal cavity, or from the adjacent portions of the intestinal canal; and similarly the escape of air from the stomach and urinary bladder, in Smith's case, admits of the same mechanical explanation as has been given in a previous page. Not so, however, the escape of air from the skin: the fact that all bodies, when immersed in water, give off a little entangled air, affords no explanation of the continuous evolution of gas from the skin: neither does the accumulation of air occasionally noticed in the intestinal canal of swine seem to admit either of a mechanical or chemical solution. If we are asked for the particular causes of these developments of gas, I confess I can give no satisfactory reply. No secretion of gases occurs in the human body in a normal condition; for the development of gas in respiration is a purely physico-chemical proceeding, and is in exact accordance with the laws of displacement and diffusion of gases, as has been recently proved by Valentin and Brunner;* and, probably, the same law holds good for the development of gas through the skin. We can only refer to the analogical proceeding in fishes, where we find an actual secretion of gas in the swimming-bladder, and must, for the present, defer all further questions respecting their causes or pathological indications." p. 32.

The most important deviations in the condition of the blood, are described to be as follows:

"1. Its physical and chemical characters may undergo alteration. It may be either thinner or thicker than usual, and its colour may be affected. The blood-corpuscles may appear changed. The proportion of its constituents to each other may be altered, and it may contain matter not normally existing in it, as sugar, free lactic acid, &c.

* Valentin, Lehrb. d. Physiol. d. Menschen, vol. 1, p. 559.

"2. Its quantity may be increased (hyperæmia or polyhæmia) or diminished (anæmia or hypæmia.) This increase or diminution may either be general, extending to the whole organism, or local, and restricted to particular parts of the body.

"3. It may be effused in consequence of laceration of the blood-vessels, into the interstices of the parenchyma of certain organs, or into some of the cavities of the body, constituting extravasation.

"4. The hæmatin may, by a process of decomposition, become dissolved, and then be imbibed by the tissues." p. 59.

The blood also becomes changed by the absorption of *ferments* and other extraneous matters, by which its character is at times essentially altered; and this, after all, is one of the most important considerations to be borne in mind in regard to the blood as a source of disease, and as suggesting methods of medication in various pathological states now properly esteemed of blood-origin. The pathological relations of the blood are, however, not easy of appreciation; but, for that very reason, they should be more closely investigated.

From the chapter on Independent organisms in the human body—Parasites—we extract the following in relation to *Epiphytes* or parasites derived from the vegetable kingdom.

"All the parasitic plants which, up to the present time, have been observed in the human organism, belong to the lowest forms of vegetation—the algæ and the fungi. They are all very minute, so that, to the unaided eye, the greater number are totally invisible, and others are only perceptible when accumulated in large masses. In order to recognize their peculiar structure, and thus to arrive at a more accurate diagnosis, the microscope is invariably necessary, and very high powers are often required. They are found either upon exposed surfaces, namely, upon the skin and mucous membranes, or floating in the fluids of the body. I am acquainted with no authentic case in which they have been observed during life in the parenchyma of human organs. Respecting the origin of vegetable parasites, there are the same two different views which have been noticed in relation to the origin of parasites generally. Whilst, for instance, Kützing,* who has devoted much of his attention to the lower algæ, maintains, that their origin by repeated spontaneous generation is possible, others limit their origin to the mode by

* Phycologia generalis, Leipz. 1843. p. 129, &c.; or his remarks in Erdmann's Journal f. prakt. Chemie, 1837, vol. xii. p. 391.

propagation. Although a positive decision of this disputed question may at present be impossible, it nevertheless appears to me that there are overwhelming reasons in support of the view that they invariably owe their origin to propagation alone. These reasons are chiefly founded upon the researches of Schwann on fermentation, upon similar investigations of Holmholtz,* and upon others which Dr. Merklein has abundantly instituted upon this subject, all which show, that under conditions which otherwise prove favourable to the formation of fungi and algæ, these do not present themselves, when the possibility of the transference of uninjured germs is precluded. Moreover, all the parasites hitherto observed increase in enormous ratios by means of germules or spores: the latter are so infinitely numerous, so minute, and maintain their germinating power so tenaciously against the most common external agents, that by means of water and currents of air they certainly become universally diffused, and can, therefore, develop themselves wherever they meet with favourable conditions. That we have hitherto, in most instances, failed to demonstrate the origin of fungi by transference of germs, can be no argument against this mode of propagation; for, even in the most careful examination, certain fungus-spores, whose diameters are sometimes less than the 1000th of a line, may, and indeed always will escape the notice even of the most practised observer. In some cases the transference of parasitic fungi, or of their spores, from one subject to another, becomes facilitated by distinct relations, as immediate contact, &c., as may occur in porrigo, in some forms of impetigo, mentagra, &c. These are the cases which are especially regarded as contagious. In general, however, peculiar conditions appear requisite for the development and increase of the transferred germs—conditions which are in general only realized by pathological relations. It appears, for instance, that the surface upon which they are to develop themselves must in general, if not always, be in a certain state of chemical decomposition (putrefaction or fermentation;) as, indeed, we find that externally to the human and animal organisms, most fungi are developed only on putrefying substances. Experience shows us, that parasitic fungi are especially liable to occur on foul ulcers, and probably only exist on the skin or mucous membrane in the cases where these are furnished with a layer of decomposing exudation. Parasitic plants have so far a diagnostic value, that they indicate that a process of decomposition is going on, however locally circumscribed it may be. Hence it follows that they do not become developed at all spots on which the germs are deposited: their growth indicates a certain morbid disposition. This view

* Müller's Archiv. 1843, p. 453, &c.

is opposed by the results of experiments made with the view of showing that parasitic plants can be transferred by inoculation to apparently healthy organisms, and then give rise to morbid phenomena: thus, for instance, Hassal* was able to transfer, by inoculation, parasitic fungi from diseased to healthy lettuces, in which they produced the same disease, (softening of the stem.) These cases, however, prove but little: they merely show, that in some instances the disposition to fungoid development need not be great; and they are, moreover, open to the objection that the plants which were inoculated having, perhaps, the same *habitat*, and living under similar relations, already bore within them the morbid disposition." p. 428.

Dr. Vogel then describes the different fungi found in animal fluids—the yeast plant, and sarcina ventriculi; and next the parasitic fungi found on the integument, and its appendages, of man—those of porrigo, mentagra, plica polonica, and of the mucous membranes; after which he treats of the different parasitic animals; terminating with a learned view of malformations, in which he includes the different forms of monstrosity.

The plates, ten in number, are well executed, and the whole work is exceedingly instructive. It indicates on every page that the author is a well read, painstaking, and accurate observer; fully aware of what has been done in other countries as well as his own; and always anxious to do justice to his brethren who have been engaged in the same labours. We shall look with anxiety for the promised volume on special pathological anatomy, which we doubt not will be worthy to take its place alongside the one before us.

Dr. Day—the translator—appears to have executed the duty—if not elegantly—faithfully. He modestly states in the preface, that the additions he has made are trivial and unimportant, with the exception of the plates and their explanations. "These," he remarks, "are almost entirely selected from the author's 'Icones Histologiæ Pathologicæ,' and will, I trust, be found valuable aids to the clear understanding of the subjects they are intended to illustrate." p. xx. We wish he had added "Tabula xii" of the "Icones"—"*Epizoa atque Entozoa Hominis*," in which the different parasites are delineated. The other plates,

* Froriep's N. Notizen. Oct. 1843, p. 54, &c.

referring—as they do—to lesions of special organs, will doubtless appear in the next volume.

We are glad to find, that this valuable treatise is about to be reprinted in this country by the enterprising house of Lea & Blanchard of this city.

Medical Instruction in the United States: an Address delivered to the students of the Philadelphia Association for Medical Instruction, at the close of the Session of 1846. By Alfred Stillé, M. D., Lecturer on Pathology, and the Practice of Medicine.

In this address, Dr Stillé controverts the assertion of Professor Paine "that American physicians *greatly surpass* all other nations, not only in the *decision*, but in the *success* of their practice," and argues that in attainments, so far from being equal to those of the different nations of Europe, they are greatly behind, and therefore cannot possibly *surpass* them in *decision* or *success* in the treatment of disease.

After contrasting the qualifications for entering upon the study of medicine, demanded in various sections of Europe, with the looseness which prevails in the United States, the lecturer makes the following statement:

"After all the preparatory study we have described, what term of attendance on medical lectures is required of European students? In Austria and France *fifty* months; in Prussia and the secondary states of Germany *forty* months; in Great Britain and Ireland *twenty-four* months; while in the United States, we undertake to produce a competent physician in *eight* months, or one-third of the time deemed necessary by the lowest of the European schools."

In this statement the system of medical education pursued in the United States, it strikes us, is not quite fairly compared with what obtains in Europe. With us, *three years* study we believe is demanded by all the colleges, including attendance on lectures. The student in his attendance on lectures, instead of being confined to two or three subjects in different years, thus extending the term to four or five years, is occupied with all the branches at once, so that in two courses of four months each he may hear as many lectures on certain subjects as would consume double

the period of time when but half the number are given. Whether the number of subjects taught simultaneously is more than the mind of an industrious student can master is another question. Every one, who attends but two lectures a day, will not learn more of these particular subjects than others who are engaged with six; and therefore, according to our republican notions of justice, the industrious man, who can acquire a competent knowledge of his profession to commence the practice of it in *three* years, should not be subjected to the expense of a protracted pupilage, because the drone and the dolt may require *five* or *seven*. With us, it must be recollected, no part of a medical student's expenses are borne by government, as in continental Europe, and in the yet infant state of our country the means of parents generally are not adequate to great expense in the education of their sons; nor does government, in most of the states, afford to the regular physician any protection against competition from the uneducated.

There is a wide difference in these respects, between our situation and that of the old institutions and despotic governments, to which Dr. Stillé refers as patterns for our imitation.

Under the circumstances in which we are placed, it would be both unjust and impolitic to prescribe a longer time or greater outlay than experience may show to be indispensably necessary for the accomplishment of the desired object. What may be the shortest time necessary is a question about which men of equal experience will differ; but as the object of all hese requirements is to insure a competent amount of knowledge for the safe and judicious exercise of the office of a physician, and as this can be arrived at by a proper examination, *and in no other way*, there ought to be no difference of opinion on this point. If every aspirant for admission into the ranks of the profession were subjected to this test, there would be little occasion for any other. There need be no inquiry *where* he got his knowledge, nor how *long* he was about it. But here lies the difficulty. The completeness of the examination must depend upon the character of those who are to conduct it. Who shall these be? In order to arrive at a correct appreciation of this matter, we must first look to the form and operation of our government, for no voluntary or self-constituted board, whether examiners or

those by whom they are appointed, can exercise any effective control or jurisdiction in the case. Of this fact, there can be no doubt. The federal government possesses no power under the constitution to regulate the business pursuits of the citizens of the States. Every thing of that kind is left with the States respectively. This is the practice as well as the theory of our government. Every state in the union, then, possesses exclusive power over this subject within its limits. But most of the states have refused, absolutely, to restrict the practice of medicine, or to prescribe any qualifications whatever for those practising it, leaving to the common law the task of guarding their citizens by suits for malpractice.

The states respectively have the power, and many of them have exercised it, of establishing colleges for giving instruction and granting degrees. Will these colleges surrender the business of teaching to other and irresponsible associations? That would be to neglect and refuse to perform the duties of a public trust, for which the law has instituted them; and if the existing faculties were to take that course, there is little doubt but that the trustees who govern these institutions would soon find other occupants for their chairs, even among those most eager for reform.

Will the faculties and trustees of the colleges decline to grant diplomas or testimonials of competency to their pupils, whose deportment and acquirements have justly earned them? That is not likely. It would be surrendering the common privilege possessed by all men, of rewarding merit. It would be denying to themselves the right possessed and exercised by every school master and master mechanic, of testifying to the good conduct and proficiency of their pupils and apprentices. Until some legal enactments can be had, prescribing who may practice, and by whom they shall be examined, which is not likely to occur in many of the states in any short period, we apprehend that the present system of examination will continue, and that the character of those who shall be recognised as members of the medical profession will depend on the more or less general diffusion of education and the character of the professors in the different medical schools; whilst the character and fitness of the latter will depend upon whether the honors and emoluments of

their stations shall afford adequate inducements to properly qualified individuals to accept the appointments. That such will continue long to be the case may be doubted, when we see the facility with which charters are obtained, and the genera rage for engaging in the business. If the system of medical education is to be improved, and the respectability of the profession maintained, the number of medical colleges must be limited to the actual wants of the community. How this is to be attained it is difficult to say. Most likely the college fever will be allowed to run its course, until a crisis ensues from the complete exhaustion of all means of support. In some instances, like too many plants in one parterre, some will wither and die, whilst others, deriving additional strength and support from their decay, will bring forth better and more abundant fruit.

Notwithstanding the unfavourable picture of us painted by Dr. Stillé, we very much doubt whether we are really so much worse off, or the physicians of the United States are in practical tact and usefulness so much in arrear of their European brethren. Take, for example, the following sketch of matters in England, quoted by him from a work by Mr. Surgeon Wilde, of Dublin: "In England, with few exceptions, (and even in those exceptions the kind of instruction is very meager) there is little or no preparatory education required by the different colleges and licensing bodies. The student is at perfect liberty to choose what lectures, or how many, he will first attend; the object being not how he can best prepare his mind by initiatory degrees, for the more mature branches of study, but how he can soonest, easiest, and cheapest, become possessed of the *certificates of attendance* on the lectures he has never heard. There are no tests required as to his knowledge of any of the subjects he is *supposed* to study till the hour of his examination—and when this examination does arrive, the chances that he is never asked a question, except upon anatomy and surgery, and a little physiology, are, in the chief licensing institutions of Great Britain, so slight as almost to amount to a certainty."

If there is any institution for granting degrees in the United States where the business is conducted as badly as this picture represents, we are wholly ignorant of it.

But the author of the lecture says they manage things better

in France, in Prussia, and in Austria. The two last of these governments are units,—absolute monarchies; and can therefore enact what edicts they please, and enforce them throughout their entire kingdoms; which makes a wide difference between their condition and ours. But are the medical men of these countries so much superior to those of Great Britain? Who among all their physicians has done more for our science than Sydenham, Harvey and Jenner; of their surgeons, who more than Pott, Hunter, Cooper, and Brodie; among their chemists, who more than Cavendish, Davy and Dalton? We are aware that a few bright examples are not fair representatives of the whole; but how is it with the mass? Are the practitioners of Great Britain inferior in skill and capacity, as a general rule, to those of France and Germany? We think Dr. Stillé, with all his predilections on this subject, will not assert it. Great learning and the capacity for great usefulness do not mean one and the same thing, nor are they always associated in the same individual. A certain amount of learning is unquestionably essential for a physician;—as to how much, and on what subjects, apart from that of the science itself, much contrariety of opinion exists. Dr. Stillé would undoubtedly require, as a part of his preparatory education, that a student of medicine should be well versed in the Greek and Latin languages; and yet Dr. Rush, in an introductory lecture delivered several years after that quoted by Dr. Stillé, argued that the time employed in their acquisition is mis-spent, and ought to be devoted to other objects. A gentleman, who is himself a bright example of what learning can confer upon its possessor, is content to say that "the education of the youth who is intended for the medical profession should be essentially that adapted for the well educated gentleman," which is probably as near an approximation to the point as we are likely to arrive at.

It is a misfortune that in all attempts at reform the errors proposed to be corrected and the advantages to be gained by the change, are equally exaggerated in the minds of those engaged in the enterprise. They too often see only what seems *desirable:* the *practicable* is overlooked, and they forget that alteration is not always improvement.

Whatever may be said of the system pursued in France,—in point of *learning* the members of the medical profession cannot be compared with those of Britain. Even in professional qualifications, with a few bright exceptions, they are behind our own countrymen. Too often, their views and attainments are limited to some specialty, which, in the estimation of the individual, comprises the whole circle of knowledge.

The lecture before us derives importance at the present moment, beyond what is ordinarily due to a well written essay by an estimable individual, from the spirit of reform which has gone abroad among the profession in this country, the promptings of which are to be manifested in the proceedings of the National Medical Convention to assemble in this city in May next. From the diverse objects contemplated by those who are to take a part in the proceedings of the Convention, and the discordant views entertained and already expressed on many points, it is difficult to form any idea of what will be the results of its deliberations. If all utopian schemes be discarded, and none but such as are practical adopted, good may result. For ourselves, we neither anticipate so much good, nor apprehend so much confusion and evil from its proceedings, as many of those who are arranged on opposite sides. None have laboured more earnestly than ourselves, in times past, to elevate the standard of medical education in the United States, nor does any one more sincerely desire it now. On this point our feelings have undergone no modification in the lapse of time and the change of circumstances; but our knowledge of the difficulties that lie in the way is increased, and with it our hopes and anticipations of great results are diminished.

The burden of complaint in the lecture before us, as well as in the mouths of all who are most earnest in the movements on this subject is, that the courses of instruction given in the colleges are not sufficiently numerous and complete, and that the standard of graduation is too low,—forgetting altogether that a very large number of the practitioners throughout the country attend no lectures at all, and a still larger number never graduate or submit to any examination whatever. Now if all could be induced to attend lectures and demonstrations, and undergo an

examination, no one can doubt that it would be the greatest of all reforms, as regards the interests of humanity, and the honour of our profession. The great and lamentable error of the existing state of things is, not that they who graduate are insufficiently instructed, but that so many engage in practice who have received little or no instruction at all. It is a serious question, whether any measures that would subject the student to a greater expenditure of time and money to obtain a degree, would not increase the number of uneducated practitioners, and in this way reduce rather than elevate the general standard of medical education in the country. If some means can be devised to require every man to submit to examination before entering into practice, it will do more to improve the respectability and usefulness of the profession, than any and all other means we have heard suggested for that purpose.

The practical scheme of improvement in medical education proposed by Dr. Stillé, at least as a beginning, notwithstanding his somewhat enthusiastic reasoning on the subject, is far from being so unfeasible as many we hear proposed. It is as follows "I will venture to state what reforms appear to me most desirable, and, at the present time, most feasible. And first, the prolongation of the lecture term from four to six months, without greatly increasing the number of lectures beyond that already delivered, in order to give the student time to think, read and attend the hospitals. Subsequently the entire term of study might be prolonged from two to three winters; an attendance, is now required on two courses only of subjects named in the existing curriculum, and the student restricted during the first year to the lectures on anatomy, chemistry, physiology, and materia medica. In the second or third year, the instruction might include several departments not now studied, such as general pathology, morbid anatomy, medical jurisprudence and hygiene, of which one course might for the present suffice."

We have no doubt whatever that this is quite as much as, and probably more than, can be effected; but will the advocates of reform be content to stop here? Will not many of those who have recently engaged in the cause with hot haste, be like the boy with the filberts,—grasp more than is compatible with success? We greatly fear so.

Contributions to the Natural History of the Alligator, (Crocidilus Mississippiensis) with a Microscopic Addendum. By BENNET DOWLER, M. D.

The New Orleans Medical and Surgical Journal of November, 1846 contains an article under this head, which has been reprinted and constitutes a pamphlet of thirty pages, abounding in curious and interesting matter.

We have several times had occasion to notice the labours of Dr. Dowler, and to speak of the strikingly original and pains-taking character of his researches. The present essay, although on a widely different subject from those heretofore noticed, manifests the same independent and investigating spirit, and from the statements it contains in relation to the anatomical structure and habits of the alligator, so different from the history of the animal given by naturalists, must be regarded with much attention by all who feel interested in this branch of natural science. Contrary to what has been asserted, Dr. D. maintains that the alligator is identical with the crocodile; and that the varieties found on the Nile, the Ganges, the Mississippi, &c., exhibit only the modifications caused by climate.

Speaking of the Alligator, he observes: "The *upper jaw* is wider than the under, which it overlaps. The latter has forty teeth, none of which are *grinders*, as asserted by Professor Owen —none are cutting or incisor teeth, as they are described by Goldsmith. The teeth of the upper jaw are similar in number and structure." * * * "The form and situation of the dental organs, together with the osteological configuration of the jaws, render *grinding* operations quite impossible. The animals found in the stomachs of alligators, show that their prey is killed by penetrating bayonet-like wounds, and swallowed without mastication. The crushing and prehensory power of the jaws and teeth is as remarkable as it is unquestionable.

"Herodotus, Pliny, Aristotle, and many more modern *savans*, including certain French academicians, assert that the upper jaw moves independently of the head, though both are known to constitute a continuous mass of bone, without any flexible articulation. I have for hours forced the jaws assunder by levers, elevating the upper jaw, and with it the head. The cranium, and the superior

maxillary bone constitute a continuous pyramidal mass of osseous matter, the base of which is the skull, and the apex the muzzle."

The author gives a very full and graphic account of the various organs of the animal's body, in which he often differs widely from former historians; and likewise an interesting account of its habits, in which he certainly represents it in a much more *amiable* light than we have been accustomed to view it.

Hand-Book of Human Anatomy, general, special, and topographical. Translated from the original German of Dr. Alfred Von Behr, and adapted to the use of the English Student. By JOHN BIRKETT, Fellow of the Royal College of Surgeons of England, and Demonstrator of Anatomy at Guy's Hospital. Demi 8vo. pp. 487. Lindsay and Blakiston, Philadelphia, 1847.

This is a reprint of a recent London publication, and time enough has not yet elapsed since it assumed the English dress to determine the rank it is to hold among the treatises on the same subject now before the profession. As anatomists and experimental physiologists, our German brethren have no superiors at the present day. They possess, besides genius, a patient and plodding industry that accomplishes wonders in matters of detail, and consequently it is to them that we are indebted for a large amount of our present advanced knowledge of miscroscopical Anatomy. The present work, although excessively condensed, contains many evidences of the traits we have mentioned. It was not originally published as an isolated volume, but is one of a series entitled "The Pocket Encyclopædia of the Medical Sciences," by Dr. Von Behr, and Dr. Minding, and now in course of publication at Erlangen. We cannot say that it is calculated to supersede the more extended treatises on the various subjects it comprises, but as a *remembrancer* for the physician, and guide to the student while prosecuting his studies in practical anatomy, it appears to us to be exceedingly well adapted.

The American publishers have done credit to the work and to themselves, by the superior manner in which it is brought out. Too often an author is insulted and his book degraded by the beggarly dress in which it is sent forth by the publishers—a charge, we are happy to say, rarely applicable of late years to Philadelphians.

Summary of the Transactions of the College of Physicians of Philadelphia. Vol. 1. From Nov. 1841 to August 1846. 8 vo. pp. 461.

During the last five years it has been the custom of the College of Physicians to publish quarterly summaries of its proceedings. These have now become sufficiently extensive to make a good sized volume, and are bound up in that form for the use of the members and such others as may desire to purchase it.

Beside reports on most of the branches of the science, made at stated periods by Committees, these "transactions" contain the discussions of the members on the various interesting points presented before the College, either in the reports or oral communications, and express, generally, the views and experience of the speakers on the doctrines and practice of the day. On various occasions we have enriched our pages with extracts from these quarterly reports, and find that many of our brother journalists have done the same, which is sufficient evidence of the value of the matter they contain.

THE MEDICAL EXAMINER.

PHILADELPHIA, JANUARY, 1847.

THE BULLETIN OF MEDICAL SCIENCE, EDITED BY JOHN BELL, M. D.

The December number of this Journal contains the *farewell address* of its Editor, in which he announces that "THE SELECT MEDICAL LIBRARY and THE BULLETIN OF MEDICAL SCIENCE will cease to be published after this date." "These instruments," says the Editor, "through which we have long discoursed with our professional brethren, will no more give utterance to our exhortation, our praises, our monitions and rebukes: our voice, henceforth, comes down to the key and pitch of those who may have, hitherto, listened with some attention, not unmixed, perhaps, with some deference." Those who, like ourselves, have long been in the practice of reading

the productions of his ever ready and well pointed pen, will regret that any circumstances should render it necessary for the able and estimable Editor to retire from a position which education and habit so peculiarly qualified him to fill. His personal friends, however, of which number for nearly a quarter of a century we have had the pleasure of considering ourselves one, recollecting his late severe indisposition, and the causes of it, will hope from the change for a longer continuance of his useful labors, than could have been reasonably expected under the excessive mental occupation to which he was exposed. No one probably enjoyed the pleasures that pertain to an Editors position more than Dr. Bell, or better knew its labours and responsibilities, so graphically sketched in the following extract.

"But if, in thus descending from our 'high estate,' we divest ourselves of the appendages of office, and cease to enjoy its honors, its emoluments, and its collateral advantages, we, at the same time, cast off heavy responsibility and ever-recurring anxieties. Those engaged in the busy walks of life have little conception of the toilsome efforts, and the many trying hours encountered by the occupant of the editorial sanctum,—in the task of selection and arrangement of contemporary materials, and of interweaving them with the learning of the past, so as still to preserve a philosophic texture,—a careful analysis and an impartial adjudication of conflicting claims of discovery and improvement,—the support of modest merit,—and the rebuke of arrogant pretensions."

"Ten years have elapsed since the first publication of the Select Medical Library; during which time, it has been the good fortune of its Editor to make it a vehicle for the dissemination, throughout the length and breadth of the land, of works, many of which adorn our medical literature and have contributed, not a little, to the practical instruction of our medical men, at the same time that they have inspired them with more curiosity, and a desire for a still wider circle of reading and research."

The business relations of Dr. Bell and the publishers, Messrs. Barrington and Haswell, are to be continued, and hereafter his labours, instead of being partly occupied with the journal, will be wholly employed on works destined—we hope—to be of a less ephemeral character.

NATIONAL MEDICAL CONVENTION.

In our *Record* department we have given the names of the gentlemen who have been appointed to represent the Medical Faculty of

the University of Pennsylvania, the College of Physicians of Philadelphia, and the Philadelphia Medical Society, in the Convention to be held in this city in May next; in all twenty-seven. If all the other medical societies and institutions throughout the country shall be represented in an equal ratio, it will certainly be a large assemblage.

As the period at which the Convention is to take place grows nearer, we discover a more general interest manifested in the subject, and a freer expression of opinion as to the feasibility or otherwise of the various schemes likely to be proposed. On another page we have treated cursorily of some points which it is probable will be mooted, and may perhaps advert to the subject again on some future occasion; in the meanwhile we shall be happy to receive from any of our correspondents, temperate arguments on the questions expected to be raised, and especially those to be reported on by committees appointed at the late Convention, held in the city of New York.

GUN COTTON.

This preparation, it appears, explodes at a temperature as low as 140° of Fahrenheit, which renders it much more dangerous to handle than gunpowder. We have heard of some serious accidents happening to persons of skill and prudence, while engaged with it. In one instance, a letter containing a small portion was blown to atoms, from the heat of the wax used in sealing it. In another case, a chemist, whilst drying a few ounces of it in a current of warm air, not exceeding the temperature of 140 degrees, was badly burnt by its explosion.

This circumstance, together with its comparative costliness, renders it probable that, notwithstanding its tremendous power, it will not supersede the old material for ordinary explosive purposes.

NEW MEDICAL ASSOCIATION.

We are gratified to learn that a number of the physicians residing in the northern section of Philadelphia, embracing Spring Garden, Northern Liberties, Kensington, Germantown, and Frankford, are about forming themselves into an association for literary and scientific improvement, and the promotion of good fellowship and sound medical ethics among the members. It is intended to admit none as members but graduates in medicine, excluding all who are practising

or encouraging the various systems of charlatanry, under the mask of reform, and thereby undervaluing the science and skill of regular physicians, and thus bringing the profession into disfavour with the community.

Many of our oldest and most respected physicians reside in the district mentioned, and their association for such praisworthy objects cannot but be productive of good, especially to their junior brethren, who will by this means be admitted to their more intimate fellowship.

TO CORRESPONDENTS AND PUBLISHERS.

We have received several books, tracts, and introductory lectures, which we shall endeavour to notice in our next number.

RECORD OF MEDICAL SCIENCE.

Delegates to the National Medical Convention.—The Medical Faculty of the University of Pennsylvania, have appointed of their number, Drs. Chapman, Jackson, and Wood, to represent them in the Convention in May next.

The Philadelphia Medical Society, at a meeting held November 21st, elected the following gentlemen as delegates to the Convention: Drs. Bell, Emerson, Isaac Parrish, West, Ashmead, Norris, B. H. Coates, Bond, S. G. Morton, Yardley, and Griscom. There is still a vacancy to be filled up by the election of a delegate, so as to complete the number, twelve, authorised by the Society.

The College of Physicians of Philadelphia, at a meeting, Dec. 1st. appointed a delegation to consist of Drs. Hewson, J. W. Moore, S. Jackson (formerly of Northumberland County), Hays, A. Stillé, J. R. Paul, Pepper, Fox, Randolph, C. Morris, Condie, and Bridges.

The Medical Society of New Jersey, which dates its origin from the 23d of July, 1766, and to age adds the merit of high standing among similar associations in the United States has elected delegates to the Convention. The list consists of Drs. Smith and Peirson of Essex County, Marsh of Passaic, Stewart of Morris, Forman of Mercer, Parrish of Burlington, Taylor and Cooper of Camden, Garrison of Gloucester, and Howell of ——.

The District Medical Society of Burlington County has appointed, as delegates, Drs, Cole, Stratton, and Read.

The delegates of the Philadelphia Medical Society, and of the College of Physicians, have been directed, respectively, to make ar-

rangements, in connexion with the delegates that may be appointed by other institutions in the city, for the reception and a suitable place of meeting of the Convention.

The Vermont Medical Society has appointed Drs. Charles Hall, C. W. Horton, A. G. Dana, and Dyer Storer, as its delegates to the Convention.—*Bulletin of Medical Science.*

Report on the Protective Powers of Vaccination.—In April, 1842, the undersigned were appointed by the College, a committee to investigate the protective powers of vaccination; the phenomena resulting when those who have been already vaccinated are again subjected to the disease, and the subject of re-vaccination generally. Various obstacles, beyond their control, prevented their performing, at an earlier period, the task submitted to them, in a manner that would have proved at all commensurate with its importance; they have, however, been enabled, at length, to bring their labours to a close, the result of which is here submitted.

The first object embraced in the resolution, under which the committee was appointed, is one of acknowledged interest; it refers to the protective powers of vaccination.

The most obvious and conclusive mode of determining the degree of protection imparted by vaccination against the influence of small-pox, is to inoculate, with variolous matter, the persons who have been previously vaccinated.

At the close of 1801, the first successful efforts were made at vaccination in this city. In the early periods of this practice, until the year 1812, every mean was employed which, at the time, was deemed best calculated to determine whether the process of vaccination would afford full protection against the small-pox. The first step generally taken, after having observed the genuine character of this vaccine pock, was to insert a portion of variolous matter, and to note its progress. Where due attention had been paid to the selection and insertion of this matter, a small red pimple appeared about the third day. On the fifth day this was converted into a purulent crust, surrounded by inflammation, generally of no great extent, which, after this period, began to fade, and was rarely perceptible beyond the eighth day; it left no trace beyond the tenth. The full and distinctive character of the variolous pock was not observed on these occasions. The persons thus treated were not affected with fever, or any general disarrangement of the system, nor was any eruption observed on the skin. The persons having been submitted to this test, were next exposed to the small-pox in the most direct manner, often by placing them in the beds with those labouring under the disease, even in its most virulent form. A like immunity attended this experiment.

From repeated observations thus conducted, observing that no instance of small-pox had been communicated to those on whom the operation of vaccination had been duly performed, the profession

ventured, in 1803, to announce the process as one affording equal protection with variolous inoculation.

The reasons for preferring the process of vaccination to that of variolous inoculation could not fail to be appreciated, and were strongly urged in the circulars issued for the public information.

Under the most favourable circumstances, and where every attention had been paid to insure success, many of those who had been inoculated for the small-pox were known to have fallen victims to the disease. The estimate most generally received, and founded on a large experience was, that one in four hundred of the inoculated fell victims to the process; some practitioners were stated to have been more fortunate, and to have lost not more than one in a thousand. On the other hand, of the thousands that had been vaccinated, not a death had been recorded, which could be imputed to this process. The age of the individual, or the physical condition of the other members of the family, constituted no objection to the operation, as the cow-pock could be communicated by the direct application of the virus only; while in the instance of the small-pox, the effluvia emanating from the infected, were known to impart the disease to the unprotected, and under circumstances when it was likely to prove fatal. In addition to the loss of life, caused by the small-pox, even when the result of inoculation, the mutilations which were so often consequent, even when life was preserved, must have been familiar to every one acquainted with the disease, whether casually received or by inoculation.

Unfortunately, the reputation of the Jennerian process has been materially affected by the ignorance of the persons by whom the operation has been frequently undertaken, and by the want of attention on the part of some of the profession in visiting at the proper periods, and recording the phenomena observed. The period when the areola may be expected ought never to be neglected. The evidence that may be obtained from such circumstantial records, will tend to dispel many of the idle reports so freely circulated to the disparagement of vaccination. By consulting such recorded documents, it has been clearly ascertained that the majority of the cases of small-pox ascribed to the failure of the protective process were, in reality, owing to the imperfect manner in which the operation had been conducted. There is abundant evidence recorded in medical books, of persons having suffered from small-pox more than once; where such a peculiarity of constitution exists, it cannot be a matter of surprise that the disease should be occasionally observed after vaccination, even in cases where the genuine and perfect character of the vaccine process has been fully developed. A careful examination of these histories does not exhibit any appreciable difference in the proportional number of such cases, whether after small-pox or after vaccination.

By an act of the Legislature, passed in 1811, to communicate the infection of small-pox by inoculation, or otherwise, has been prohibited, under certain pecuniary penalties. For the four succeeding years, the disease is not recorded in the bills of mortality; and the

mode of most conclusively testing the protective powers of vaccination necessarily ceased. And hence the profession have, since then, been deprived of a measure so intimately connected with the inquiries to which the attention of your committee has been directed.

Touching this very important question, it must be acknowledged that the documents at command are but few; nevertheless those that have been preserved, afford the evidence that, after the lapse of three years, the vaccinated were found no longer susceptible of small-pox by inoculation. Among the persons thus treated, it has been ascertained that an infant, vaccinated within a month, resisted the variolous infection after an interval of the same number of years.

For the want of that full and comprehensive information which our more immediate resources fail to afford, it may prove acceptable if we here present the experiments made by that distinguished and accurate observer, Biot:

"In August, 1826, a number of boys, between the ages of twelve and sixteen years, were inoculated in four places with small-pox virus by Dr. Biot, one of the physicians to the hospital St. Louis, at Paris. A part of these had been vaccinated, and a part had never been protected from the small-pox. In those who had been vaccinated, the insertion of the variolous virus had no other effect than to produce a slight inflammation for two or three days at the points where the matter was introduced. Those who had never been protected were affected differently, and contracted the variolous disease."

In this stage of the inquiry, it appears not irrelevant to notice the diminished mortality from small-pox, as observed in this city, since the introduction of vaccination. Whenever that disease has appeared, it has been viewed as among the severest scourges inflicted on mankind, and the most appalling apprehensions have been entertained by every community which it has visited. The sufferings of those affected with this malady have at all times awakened the most painful and anxious feelings in friends and connections, and called forth the assiduous and unremitting care of the attendants and those administering to the sick. In seasons of epidemic small-pox, the mortality has been observed to be great. In 1721—22, in the town of Boston, five thousand seven hundred and fifty-nine persons were affected with the disease, of whom eight hundred and forty-four came to an untimely death, as publicly announced by the municipal authority of that city. This was a fearful mortality, particularly when we advert to the number of persons inhabiting Boston at that period. In the succeeding year, 1722, the census was taken, indicating a population of ten thousand five hundred and sixty-seven; if, to this, there be added the number who died of small-pox, eight hundred and forty-four, the sum will be eleven thousand four hundred and eleven, as the total population previous to the ravages of the small-pox having commenced. One-half of the inhabitants of the city were affected with the disease. Of those, between one-sixth and one-seventh came to an untimely death, and the city lost nearly one-thirteenth of its population.—*Zubdial Boylston, on Small-pox, p.* 33.

Of those who survived the loathsome disease, many, from the hideous aspect and mutilations caused by the disease, continued through life the objects of commiseration, and too often of disgust.

Laws have been enacted, and rigid quarantines enforced, with the view of preventing the introduction and spreading of the small-pox. In small communities, having little intercourse with other portions of the world, these efforts have proved successful for a season ; but the temporary immunity thus enjoyed has only rendered the subsequent ravages of the disease the more disastrous. The nations engaged in commerce soon experienced the futility of every attempt to insure exemption from the disease ; for though the infected were secluded, and denied all intercourse with those deemed liable to the disease, the poison was found to be frequently conveyed by means of the clothing, and articles taken from the chamber of the sick. For successive ages, the pestilence was submitted to as an inevitable evil, and allowed to extend its baneful influence, annually destroying large portions of the inhabitants of the earth, and in some instances depopulating whole districts.

The deaths from casual small-pox have varied, from circumstances not in our power to appreciate. The character of the seasons, the peculiarity of position and the nature of the intercourse between the infected and those liable to take the disease, have had their influence in determining the malignity and mortality observable in different years.

The materials having relation to the medical statistics of Philadelphia, that can be gleaned from its early history, are extremely scanty and defective. It is only within the present century. and for the period of barely forty years, that any of the reports of the deaths have been publicly made. Prior to this period the records of the interments were confined to particular religious societies, necessarily difficult of access, and, generally, ill adapted to the present purpose. Though restricted to a narrow sphere, and not embracing the entire population comprehended within the city and districts, the registers kept at the Dispensary afford a document which may constitute a proper basis to found the estimate of the advantages gained by vaccination. From the foundation of the institution to the close of 1801, including a period of sixteen years, when variolous inoculation was considered as the only protective process available against casual small-pox, fifty-one persons are stated to have died of this disease, while the entire number of deaths, from various diseases, were seven hundred and one, establishing the proportion to be seventy-three in one thousand, which accords with the most favourable estimates made in Europe, and will hardly be excepted against by those who are the least favourable to vaccination.

In 1807, by an act of the Legislatute of the State, every death within the city and districts, must be reported to the Board of Health, the certificate expressing the disease of which the person has died. From this source, clear and positive evidence may be obtained. From the annual reports during the period of four years, variolous

inoculation still being permitted, it appears that the deaths from various diseases amounted to ten thousand seven hundred and forty-four, of which number, four hundred and twenty-nine were from small-pox. This affords the evidence of a considerable reduction in the proportional mortality from this disease, it being as forty in the thousand; during a period when vaccination had been practised and institutions established for its dissemination.

Since 1811, variolous inoculation has been prohibited by law. During the four succeeding years, not a death from small-pox was recorded. In 1816, there was a great influx of foreigners, particularly from the British dominions in Europe; by these persons the disease was introduced into this city, and proved fatal in that year to no less than ninety-seven persons. It was accompanied with a papular eruption, resembling, in many particulars, mild variola—affecting some of those who were believed to have been protected from small-pox by having previously undergone what was supposed to be successful vaccination; of these, no death is recorded that has come to our knowledge. In 1820, 21, 22, the city again enjoyed an exemption from this malady. This assertion is founded on the fact of no deaths from small-pox, in these years, having been reported to the Board of Health. In 1823, 24, the pestilence again afflicted our city, and the mortality from this source amounted to four hundred and eighty-four.* The fact that a large number of those who had been previously vaccinated with the greatest care, as well as many of those who had previously passed through small-pox by inoculation or otherwise, were attacked during this epidemic with a modified form of small-pox, created considerable alarm in the public mind, and directed anew the attention of the profession to an investigation of the amount of protection afforded by the vaccine disease. Upon the recurrence of small-pox in 1827, the Medical Society of Philadelphia appointed a committee to collect and report to the society all the facts within their reach, in relation to this important subject. The committee immediately addressed a circular to the physicians of the city and county, containing a series of interrogatories calculated to elicit information in relation to the protective powers of vaccination. The report of this committee, embracing the facts collected by them, was made to the society in 1828, and was of such a character as to renew the confidence of the profession in the protective powers of the vaccine infection.† Notwithstanding, it was admitted that in many instances, those who had been previously vaccinated would be liable to become affected, during the prevalence of variola, with a modified, and, usually, mild form of small-pox, yet it was shown that the public are highly benefitted by the practice of vaccination, which

*For an account of the epidemic of 1823, 24, we refer to a very able paper by Drs. Mitchell and Bell, in the North American Medical and Surgical Journ. vol. ii. p. 27 et seq.

†For a copy of this report, see North American Medical and Surgical Journal, vol. v. page 400.

was, in every sense, to be preferred to inoculation, and hence, that humanity and sound policy imperiously demanded its continuance.

In succeeding years, with occasional mitigations, Philadelphia has suffered more or less from the disease. Taking the whole period since variolous inoculation was prohibited, the mortality from all sources has amounted to one hundred and forty-three thousand and seventeen, of this number, two thousand four hundred and ninety-seven are referred to small-pox; by which it will be perceived that the proportional mortality has been reduced to eighteen in the thousand.

We have thus endeavoured to exhibit the degree of protection against small-pox afforded by the process of vaccination. The evidence adduced does not depend on individual experience, but rests on the broad basis of the public records, into which no undue bias can have entered.

It must be conceded, that the anticipations of the warm friends for vaccination, that this process would lead to the extirpation of the small-pox, have not been accomplished. In making this concession, the question necessarily arises, whether the requisite precaution, for preventing the intercourse of those affected with small-pox, and those still susceptible of the disease have been duly enforced. The remarks of one who took a lively interest in arresting the progress of this loathsome malady, appear to be particulary pertinent, and to deserve the earnest consideration of every individual desirous of removing from the community this dreadful scourge. The words of Dr. Haygarth are, "the discovery of vaccine inoculation by Dr. Jenner is the most fortunate and beneficent improvement that medical science ever accomplished. It does not, however, preclude the necessity of investigating the nature of the variolous poison, and of considering by what regulations its propagation may be prevented. In order to secure the unthinking multitude from this destructive pestilence, measures to prevent the casual *small-pox* should every where accompany vaccine inoculation; without such protecting care by the wise and humane part of society, this mortal malady would, for ages, lurk unheard of and unsuspected, to the annual destruction of many thousands. No town, no village, not even a single solitary house would enjoy perfect safety from danger."

The foregoing, your committee beg leave to present, as a solution of the first question submitted to them by the College.

The occurrence, year after year, of the small-pox in the city of Philadelphia, and in other communities, and the frequency with which those who had been vaccinated were attacked with a more or less severe, though generally modified form of the disease, induced many to suppose that the protective power of the vaccine infection was only temporary. The question as to the necessity of re-vaccination now arose, but whilst few practised it, many condemned it as useless, and calculated to weaken public confidence in the protective powers of vaccination. Others, however, maintained that, as there was no certain criterion by which the protective powers of the primary infection

could be established with absolute certainty, re-vaccination was necessary in all cases in order to test the efficacy of the first operation. This opinion very naturally obtained importance from the fact, that few cases of modified small-pox were known to have occurred after a second vaccination, provided the insertion of the vaccine virus produced an action sufficient to prove that it had been taken up by the absorbents; also, from the disease being observed, in numerous instances, to be arrested in families, and in neighbourhoods, where those already reputed to be vaccinated were again subjected to the operation.

When vaccination has been repeated in those who have been previously subjected to the disease, it is found to produce a local affection, marked by very different degrees of intensity. In some, slight inflammation occurs on the second or third day, and then fades away. In others, various degrees of inflammation manifest themselves, followed by a pock or pustule, terminating in a brown or yellow crust, whilst, very rarely, a distinct, regular areola is produced, or the other phenomena of the genuine disease, as will fully appear from the table here annexed.

The subject of repeated vaccination has engaged a large feld of inquiry in different parts of Europe; a very full abstract of the results of which, will be found in the work of Dr. Condie on the Diseases of Children, page 458.

The second question, therefore, submitted to your committee, was to determine the phenomena resulting when those who have been already vaccinated are again subjected to the disease, and the necessity and policy of re-vaccination. It is to the first portion of this question that the committee have been obliged, necessarily, to confine their attention. It must be very evident that to test fully the necessity or propriety of re-vaccination, would either require that after large communities shall have been a second time subjected to vaccination, time be allowed in order that they may be repeatedly subjected to the influence of variolous contagion, during the epidemical visitations of small-pox, or that the direct test be resorted to of inoculating with small-pox those who have been successfully vaccinated, at different periods subsequent to the primary operation, as well as after a secondary operation, and carefully noting the comparative immunity from the impression of the variolous poison exhibited by each class of patients.

In order to obtain as wide a field of observation as was in the power of your committee they applied to the comptrollers of the public schools, soon after their appointment, for the privilege of vaccinating the scholars whose parents would consent to the operation being performed; whether they had been previously vaccinated or not; in order to accertain the degree of impression that would be made in each case by a repetition of the operation, and with a view of watching hereafter the effect or influence it may have in preventing the occurrence of small-pox in the subject of our experiments, should an epidemic of that disease again appear amongst us. But the comp-

trollers did not at that time consent to our request, and the investigation of the subject had to be postponed. In the early part of the present year, small-pox again made its appearance and excited considerable uneasiness in the minds of the public. Your committee entertaining the opinion that the period was propitious for a renewal of their application to the comptrollers, accordingly did so, and their consent was promptly given. Circulars were then sent to the parents of the children, attending several of the schools, requesting their permission, which was in most cases readily granted, and every facility was offered to carry into effect the object your committee had in view.

The operation was performed in nine hundred and thirty-one cases; six hundred and thirty-five of whom took on various grades of action; many of these had been vaccinated three, four, and five times before, and stood in relation to small-pox, chicken-pox, and varioloid as stated in the following account:—

Nine hundred and thirty-five persons reputed to have been protected by previous vaccination, having distinct cicatrices on the arm, or by having passed through the small-pox, were subjected to the action of the vaccine virus.

50 did not appear on the days appointed for examination.

294 exhibited no signs of inflammation from the process.

52 of these were reputed to have been previously vaccinated twice.
6 " " three times.
1 " " four times.
14 " to have had the small-pox.
36 " " varioloid.
72 " " chicken-pox.

76 had various degrees of inflammation on the fourth day, which had faded before the eighth day

15 of these were reported to have been previously vaccinated twice.
2 " " to have had the small-pox.
5 " " " varioloid.
26 " " " chicken-pox.

181 had inflammation more or less severe, accompanied by a yellow or purulent crust, on the eighth day.

30 of these were reported to have been previously vaccinated twice.
11 " " " three times.
2 " " " four times.
1 " " " seven times.
9 " to have had the small-pox.
7 " " " varioloid.
50 " " " chicken-pox.

95 had very diffusive inflammation, the pustule still moist on the 8th day.

10 of these were reported to have been previously vaccinated twice.
1 " " " three times.
1 " " " four times.
2 " to have had the small-pox.
4 " " varioloid.

23 of these were reported to have had the chicken-pox.
179 exhibited more or less inflammation and a brown crust on the 8th day,
10 of these were reported to have been previously vaccinated twice.
4 " " " three times.
1 " " " seven times.
8 " to have had the small-pox.
7 " " varioloid.
49 " " chicken-pox.
57 had a pock with various degrees of inflammation; diffused and irregular in its margin on the 8th day.
2 of these were reported to have had the small-pox.
15 " " chicken-pox.
3, viz. a boy and two girls, exhibited a well defined pock and the areola characteristic of the perfect vaccine impression as observed on the 8th day. They are stated not to have been affected with the small-pox, varioloid, or chicken-pox.

From the foregoing observations, as well as from those derived from previous practice, your committee are justified in the conclusion, 1st, that vaccination is the best preservative of human life now known against the contagion of small-pox; and although it has not answered the full expectations of its more sanguine advocates by protecting the system in all instances against at least a modified form of variola, which is the case with the small-pox itself, nevertheless, life is very generally protected by it, and humanity and sound practice imperiously call for its continuance.

2ndly. Patients who have been once fully subjected to the influence of the vaccine infection, lose, in a great degree, their susceptibility to a second infection; the susceptibility diminishing still more at every subsequent vaccination.

3rdly. That portion of the community who have been once successfully vaccinated are in the great majority of cases fully protected from small-pox or varioloid.

4thly. A second vaccination does not insure the system in every instance against an attack of varioloid; neither does second vaccination prevent an impression being made on the system by a subsequent operation.

5thly. Upon the recurrence of small-pox in a family or neighborhood, it is all important that all individuals in regard to whom there is any doubt or uncertainty as to the fact of their having been successfully vaccinated, should be subjected immediately to the operation, this being the most certain means of preventing the spread of the variolous contagion.

Your committee have not heard of a single instance of varioloid having occurred in any of the children of the public schools vaccinated by them, notwithstanding the epidemic was prevailing at the time and subsequently.

D. Francis Condie,
Thomas T. Hewson,
J. Wilson Moore. } *Committee.*

Accompanying this report there was presented a table containing the name and age of each individual re-vaccinated by the committee, the number of times each had been previously vaccinated; noting those who had been affected with small-pox, varioloid, or chicken-pox; and the appearance of the arm on the fourth and eighth and twelfth days, with remarks on the result of each case.—*Summary of the Transactions of the College of Physicians of Philadelphia.*

Polypus of the Rectum—Clinical Lecture, by M. Guersant, Jun.—A little girl was lately admitted into the Hôpital des Enfans under the following circumstances:—Two months since, blood was passed in small quantities with the motions, and during the expulsion of the fæces a red tumour was observed to protrude from the anus. When a child presenting these symptoms is brought to a surgeon, it is natural to suppose that the case is one of prolapsus ani: this opinion must not, however, be exclusively adopted; we have several times detected in such children the presence of polypus in the rectum. It is worthy of remark, that no ancient or modern work on the diseases of infancy has alluded to this form of disease. M. Stoltz, in 1831, was the first to give a history of the symptoms, and two cases only were previously on record: one published in "Hobold's Journal," 1828, by M. Schneider; the other, by Dr. Lange, of Berlin, in 1776.

The first signs are those above mentioned, viz., sanguineous motions, and tenesmus; defæcation gradually becomes more and more impeded, in proportion as the polypus increases in size, and is accompanied by violent efforts of expulsion, which force out from the intestine a red, even tumour, at first easily reduced. We have often noticed a sign which we conceive to be of some value—it is the presence of a groove or furrow on the surface of the fæces, caused by the presence of the polypus; but the issue of the tumour through the anus is the only certain diagnostic sign. During the first period of the complaint the swelling is round, and slightly flattened at its sides; the external segment is more voluminous than its intestinal portion.

Authors do not agree upon the nature of these growths: some consider them to be of a fibro-cellular structure; others, on the contrary, believe them to be always of a mucous texture. Thus, M. Stoltz thinks, that in many cases, they are the result of frequently repeated prolapsus ani, a portion of mucous membrane incarcerated in the ring of the sphincters becoming congested, swollen, and pediculated after a certain period. Such may be, in some instances, the real mode according to which polypus of the rectum is generated, but there are many exceptions—thus, polypus is frequently observed on mucous surfaces unprovided with sphincter muscles; besides, prolapsus ani has other well-known results; let us add, that polypus has been observed in subjects who had never suffered from prolapsus ani. We have usually found these polypi to consist of a mucous sheath borrowed from the mucous membrane of the rectum, enveloping a spongy texture.

So long as the tumours do not issue through the rectum, a hemorrhagic discharge from the intestine, and the nature of the stains of the linen, cannot furnish a positive basis to the diagnosis; the finger must be introduced *per anum*, the pedicle of the tumour accurately circumscribed, and the spot of its insertion precisely ascertained. Although the prognosis must usually be favourable, still the abundance and frequent return of hemorrhage may seriously injure a child's health, and it is therefore necessary to come to a speedy determination when once the nature of the disease has been correctly ascertained. The spontaneous cure can be readily understood; the polypus, gradually expelled by efforts of defæcation, drags more and more upon the pedicle, which daily diminishes in diameter and increases in length, until at last it yields to the frequent repetitions of the efforts; the polypus falls away, and a spontaneous removal of the complaint may be said to have taken place. Perhaps even such polypi may have been the unknown and unsuspecting cause of rebellious diarrhœa, which ceased after their spontaneous expulsion, after medicines of various kinds had previously been exhibited without success.

We do not approve of the use of caustics, because their action is uncertain, and their application in cavities like the rectum is always inconvenient, and sometimes unsafe. Excision we adopt only when the neck of the tumour is very narrow, because even a slight hemorrhage may endanger the life of a child. We prefer to all other methods, simple ligature, because all danger from loss of blood is obviated, and the little patients suffer no pain: in general, when the implantation of the pedicle is not very high, the threads may be simply carried with the finger round the neck; but, in the contrary case, the introduction of the speculum ani considerably facilitates the operation.—*London Medical Times.*

Dislocation of the Shoulder—M. Robert exhibited to the meeting of the Society of Surgery a dislocation of the humerus downwards, artificially produced on the dead subject. The head of the bone rests upon the ridge of the scapula, immediately beneath the glenoïd cavity, in a sort of groove formed in front by the subscapularis, and posteriorly by the long portion of the triceps muscle. The form of displacement had been admitted by T. L. Petit, Boyer, A. Cooper, &c., and M. Malgaigne, in refusing to admit its possibility, had, M. Robert believed, been guilty of error.

M. Malgaigne insisted that M. Robert's artificial luxation was not downwards only, but also forward; the head of the humerus being on the inner side of a line drawn perpendicularly from the glenoïd surface.

M. Chassaignac had collected twelve *post-mortem* examinations of recent dislocation of the shoulder; the head of the humerus was most generally found to lie on the anterior face of the scapula, inside the glenoïd cavity; and at a variable distance from the coracoïd process. Sometimes it may rise as high as the basis of that bony projection;

at other times, it is seated below the glenoïd surface; and in some cases rests upon the axillary margin of the scapula. These differences of position, M. Chassaignac had long since mentioned in his annotations to the translation of Sir A. Cooper's works; he considered them to be of importance, inasmuch as they explain very material differences in the signs of the displacement.—*Ibid.*

Fibrous Body in the Womb.—Dr. Michom presented the uterus of a woman who had lately died in his wards. When she was admitted the organs were examined, and the toucher detected in the os uteri a solid tumour, to which the floodings the patient complained of were naturally referred. Removal of the fibrous growth was comtemplated, when accurate thoracic disease occurred, and the woman died. On dissection, a fibrous tumour was found in the upper part of the anterior wall of the womb, and the morbid production of the os tincæ contained fluid. M. Michom observed that the error of diagnosis he fell into was almost inevitable, inasmuch as a fibrous production really existed in the womb, causing the losses of blood which had been erroneously attributed to the tumour of the neck.—*Ibid.*

Operation for the Removal of Vicious Consolidation of Fractured Bone. By Dr. Malgaigne.—The operation had been performed on a child, aged eight years, of a strong constitution, who broke his leg at the age of twelve months; and the fracture having been neglected, the bones united in the most irregular manner. The fracture had taken place at the union of the inferior third with the two superior thirds of the leg, and had been permitted to unite at right angles. The muscles of the posterior region of the leg were contracted, and the deformed limb was ten centimètres (3½ inches) shorter than the other. The child had been brought to M. Guersant, who refused to perform any operation; the case had been laid before the Society of Surgery in the month of July, and opinions had been very much divided on the propriety of attempting any surgical measures for the purpose of straightening the leg. On the solicitation of the family, M. Malgaigne, however, was induced to try the following plan:—The fibula being first divided with M. Liston's ostoe tome, a portion of bone in the shape of a wedge was removed from the tibia with a saw, and the periosteum of the posterior part of the bone was not divided. The bones were then straightened, and the limb placed in a fracture dressing. On the third day hospital gangrene appeared, and the child died ten days after operation.—*Ibid.*

The Gun Cotton and Paper. By M. Pelouze.—At the last meeting of the Academy of Sciences, M. Pelouze made some observations on the mode of preparation of his explosive paper; and stated, that two of his pupils had discovered an easy method of ascertaining whether or not the paper had been properly prepared. If the paper dissolves in sulphuric ether, it is perfect; and when it is not fit for use, it is insoluble. With the balistic and explosive properties of this new

agent of destruction, by which is truly realized a maxim laid down by a celebrated French author—"Nothing in the universe is half so dangerous as a sheet of white paper"—and with the value of the discovery in the arts of war, we have nothing to do. M. Pelouze asserts, that by the action of nitric acid upon vegetable matter a compound is produced which consists only of cellulose and nitrogen, which resembling albumen, casein, and fibrin, by its elementary composition, might, like them, yield an alimentary substance. Experiments have been made upon three dogs; during four days each animal was fed on rice and explosive paper, taking every day nine oz. of rice and three of paper; it is true that the dogs did not lose weight during the period, but the exhibition of the rice must invalidate the experiment.—*Ibid.*

The Discoverer of the Effects of Sulphuric Ether. By P. W. Ellsworth.—We find, by an advertisement in one of the papers that Drs. C. T. Jackson and W. T. G. Morton have made an important invention which has been patented. In justice to a fellow townsman, I will give its true history. The first announcement publicly made was by myself, more than a year since, in an article written for the purpose of establishing the doctrine that in disease the vital power is diminished, and suggested that in all probability pain was but a peculiar depressed state of the sensor nerves, and in proof stated that stimulants acting upon this system, and having a certain relation to it, would relieve or prevent suffering; and that the dentists of Hartford were in the habit of administering nitrous oxide gas, which enabled them to extract teeth without the consciousness of the patient. The original discoverer of this was Horace Wells, dentist in this city, and he tried the first experiment upon himself. After the idea suggested itself to him, he debated for some time which to use, the gas or ether, but preferred the former as he thought it less liable to injure the system. Being now satisfied of its powers, he went to Boston for the sole purpose of introducing it to the faculty. He presented it to Dr. Warren, who laid it before his class, but the experiment first attempted partially failing, and no one seeming willing to lend him an helping hand, he ceased making any further personal efforts. He especially made known his discovery to Drs. Jackson and Morton, neither of whom had any idea of it until this moment, and must allow Dr. Wells the whole merit of the thing up to this point. We see by the Journal that Drs. J. and M. call their invention a peculiar compound. I was fully satisfied that sulphuric ether was *the* article, as it was known to be among the ingredients, and being there, nothing else was wanting to produce the desired effect. The claim, as published, sets the matter at rest; ether, and ether alone, is used, and the world will easily judge how much right Drs. Jackson and Morton have to patent it. Had they been the first to discover the fact that any gas would produce exemption from pain, and had made it known, they would have deserved commendation. They have not done this, nor justice to the true discoverer. Is there

any merit in using ether in place of nitrous oxide gas? Certainly not, for the properties of the two things are so alike in this respect, that one is constantly used for the other, and for months I supposed our dentists were using both; and the idea of allowing any man a patent for the use of the one after the effects of the other were known, is preposterous. Dr. Wells's experiments were numerous and satisfactory. One fact discovered, is extremely interesting. It is that however wild and ungovernable a person may be when taking the gas, simply for experiment, he becomes perfectly tranquil when it is inhaled before an operation: that the mind being prepared, seems to keep control over the body, indisposing to any effort.

Unfortunately it is too true, that mystery, as of a nostrum, is frequently required to induce people, and sometimes the profession, to notice an improvement, and thus far perhaps thanks are due Dr. Morton for compelling attention; yet we must give Dr. Wells the credit he justly deserves of making the discovery, spending time and money in its investigation, and then in nobly presenting it to the world. It is to be hoped every other gas and substance capable of exciting the nervous system may be experimented upon, but we hope no one will think of patenting any if discovered to be similar in its operation.—*Boston Med. and Sur. Journ.*

The Blessings and Benefits of the Massachusetts Medical Society. By a MEMBER.—Permit me, through your very useful Journal, to inquire whether any patent has been obtained for the *modus operandi* of reconciling the principles and avowed objects of the Massachusetts Medical Society, with the recent practice of some of its leading members. Probably but few country practitioners are acquainted with the process, and we presume they would be willing to pay for the secret, not only because any man, unless he be one of the veriest numskulls in the world, must readily perceive that all future discoveries in medicine, especially if they be important ones, may be patented under the auspices of a part of the members of the M. M. Society, and the secret sold to another part, but also because the inventor must be a man of very surprising genius.

We would suggest that as opium and other narcotic remedies administered for the prevention or relief of pain, whether it be taken into the stomach, injected into the rectum, rubbed upon the skin, or inhaled into the lungs, have no direct tendency to cure disease, except in cases where they prevent the shock of a surgical operation, or save the powers of life from being frittered away by continued agony (in which case it must be agreed on all hands they work even curative effects); and also as vaccination from the prevention of smallpox has no direct tendency to cure disease; and moreover, as the discovery of a remedy for the prevention of phthisis would have no tendency to cure disease; so also it seems naturally to follow that as the reconciling of the aforsaid principles with the aforsaid practice would have no tendency to cure disease, no objection ought to be made against its being patented.

By the way, we would inquire whether as new patents come out for new discoveries in medicine, the country practitioners may take turns with the city practitioners in writing the puffs and paying for the patent.

Finally, we might suggest to the members of the Massachusetts Medical Society the propriety of exercising all due meekness and quietness while the patenting business is going on, and of submitting to everything to which they are obliged to submit.—*Ibid.*

Case of Carotid Aneurism, in which Galvanism was applied to the Blood in the Sac by means of Acupuncture. By JOHN HAMILTON, M. R. I. A., Surgeon to the Richmond Hospital.—The relation of the following case may prove serviceable to those who may try the galvano-puncture in cases of aneurism. In the first trials of a new remedy, every case should be faithfully narrated, the unsuccessful as well as the successful, that the causes of failure in the first may be clearly recognised and avoided.

James Holmes, aged 43, admitted into the Richmond Hospital, March 26, 1846. He had formerly served as a soldier in the East Indies, and was, at the end of eleven years, sent home on account of bad health. When admitted, he presented the appearance of a man whose constitution had been completely broken down (as, in fact, it was) by climate, drinking, and the effects of the syphilitic poison. He had two soft nodes, one on the sternum, the other over one of the ribs. There was strumous enlargement of the lymphatic glands on the left side of the neck, with two or three fistulous openings from which thin pus flowed. He had diarrhœa, cough, headache, and restless nights; but the most distressing symptom of all was nearly constant vomiting of a greenish-yellow fluid, and of almost every thing he took. His complexion was of a pale straw colour, and he was so weak that he could scarcely stand. He had formerly been twice in hospital under my care, once for a large abscess in the buttock, and once for a suppurating node on the parietal bone, a large portion of the outer table of which had exfoliated and been removed.

Examination of the chest detected chronic bronchitis, and on the right side, where he complained of pain, there was evidence of circumscribed effusion to a small extent, with dulness on percussion, and absence of respiration, not influenced by change of position. No enlargement of the liver was discovered, nor did sufficient evidence of organic disease present itself elsewhere, but the existence of Bright's disease of the kidneys was suspected. He had occasionally slight œdema of the face, about the eye-lids. Under treatment, the nodes disappeared, the diarrhœa ceased, the pain and effusion in the right side of the chest were removed, and his general aspect improved, but all the usual remedies failed in permanently checking the vomiting; creosote seemed to have some influence, but only temporary. It was very hard to point out the cause of this obstinate vomiting; there was no sign of disease of the brain; it had not the

character of that attending scirrhus of the pyloris, nor was there pain or tenderness in the epigastrium. About a month after admission the lymphatic glands in the neck increased in size, and were painful. His voice, before of natural strength and tone, became weak and husky; but it was not until he had been in hospital six weeks that he was discovered to have an aneurism of the carotid artery.

May 7th. He complained of having suffered from great throbbing in the glandular swelling in the left side of the neck. Beside the more superficial glandular enlargement with its fistulous openings, a deeper-seated tumour could be felt, soft, and containing fluid, but having a well-marked diastolic pulsation: it was partly on the inside of, and partly covered by, the sterno mastoid muscle. Pressure on it impeded respiration; pressure on the carotid below it could not be borne, both on account of the pain and its inducing vomiting; it could not, therefore, be tried long enough to empty the sac. There was no *bruit de soufflet*. The existence of the aneurism had not been observed before, probably on account of its having been, while small, masked by the suppurating glandular enlargement over it; besides, he usually kept a poultice on the part, and, making no complaint, the whole attention was absorbed in the other more obtrusive and serious complaints. As the aneurism got larger, the glands got less, from both which causes its existence became more apparent. It was not painful or tender, but the pulsation distressed him, and the pressure on the side of the larynx produced cough of a wheezing, laryngeal character, and reduced the voice nearly to a whisper.

This man, with such a constitution, was obviously no subject for any operation with the knife; in this my colleagues and myself fully agreed; the cure by pressure was, in such a situation, of course, out of the question. Some months previously I had seen in one of the French journals an account of the application of galvanism and acupuncturation in curing an aneurism, by coagulating the blood in the sac. I then thought the plan sufficiently feasible to determine me to try it in the first eligible case.

The present case, cut off from the usual resources of art, was clearly one in which even a doubtful remedy might be fairly tried. I began to form the opinion, too, that, in the absence of any more obvious cause, the pressure of the aneurism on the par vagum might account for the obstinate vomiting.

May 15th. In the presence of my colleagues, Drs. Hutton, Macdonnell, and Macdowell, and Mr. Stapleton, of Jervis-street Hospital, I proceeded to apply the galvanism to the tumour. The state of the aneurism previous to the operation was as follows: it was about the size of a hen's egg, but rather flat, of somewhat irregular shape, with a round, smooth projection on the inside, where the walls of the sac appeared thinnest. The centre of the tumour was on a level with the cricoid cartilage, the sterno-mastoid muscle was stretched over it; the pulsation was strong, but no *bruit de soufflet* was audible.

I passed a thin gold needle into the outside of the sac, till it had penetrated to about an inch; the same was then done on the inside, the thin projecting part of the aneurism being avoided; the needles could be made to touch in the centre. I used needles of gold, as better coagulators of blood than those of steel; by the advice of Mr. Fagan, the electrician to the hospital, who was kind enough to regulate the galvanic battery for me, they were isolated every where, except at the point, by a varnish of shell-lac. The battery used was one of Smee's, consisting of twelve zinc and silver plates. The action was given very gradually, by, at first, only immersing the plates to two or three inches. When the whole force of the battery was used, it only caused moderate pain, and produced slight contraction of the muscles; he compared the pain to the prick of a leech. At the end of fifteen minutes the coagulation of the blood was not such as to cause any remarkable change in the tumour, but it appeared to beat with less force at the outside. After this the pulsation became evidently less, the tumour firmer and larger, and he began to complain of uneasy, weighty sensations, and very severe pain, which he compared to his throat being held fast by the teeth of a dog. He said he suffered much from pain in the left side of the forehead, with lightness, and other unpleasant feelings. The sensations in the tumour were very distressing, and those in the head, from their violence, assumed rather an alarming character; but the most serious symptom was the great increase of the swelling as coagulation took place chiefly in a direction upwards and downwards, in the course of the sterno-mastoid muscle; this seemed the chief cause of the pain and the tight feel in the throat.

At the end of twenty-five minutes complete coagulation had taken place in the aneurism, which felt solid, and pulsation was imperceptible; for these reasons the galvanism was discontinued. The discontinuance might have been demanded also for another reason, that round the positive needle, on the outside, the parts in immediate contact were observed to vesicate, and then to turn quite black for the size of a spangle, the vitality being destroyed by the galvanic action: when this needle was withdrawn there was a slight flow of blood, but none from the puncture of the negative needle.

So far, therefore, as the solidifying of the blood in the aneurism, the operation had succeeded, but not without considerable grounds of uneasiness. The unpleasant feel in the head continued, with the pain over the left eye-brow; the pupil was observed to be contracted, and there was *loss of sight in the left eye*. He was restless, and tossed about, complaining much of the tightness of his throat; he had twitches in the lower extremities, and complained of being chilly, and the pulse fell from 74 to 60. With respect to the tumour itself, the sudden increase was sufficiently alarming, as it was three or four times larger at the termination of the application of the galvanism. The increase, as observed before, took place chiefly upwards and downwards in the course of the muscle; it reached from about one inch above the clavicle to an inch and a half below the

ear. The tumour was also more prominent. From what did this increase arise?

May 16th. Has passed a sleepless night, and frequently vomited the iced brandy and water which he had been ordered. He had pain both in the head and in the tumour, and was unwilling to have the latter touched, it was so sore. Reaction had now set in, and the pulse was 86. The tumour was quite solid in every part, except at the inside, where it was softer, and where, I thought, I felt pulsation, but it was too indistinct to be certain. The whole solid body of the tumour was lifted up by each pulsation of the trunk of the carotid beneath it. He did not suffer pain in either the head or tumour; but complained of great weakness. Tongue rather dry, and thinly furred.

17th. Says he is better; no pain or throbbing sensation in the tumour; it looks large, I should say about four times larger than before the application of the galvanism. It feels hard and perfectly free from pulsation at its posterior half; but at its anterior half, where there is the sensation of fluid, pulsation is perceptible, but less strong than before. He does not now complain on its being touched. Where the positive needle was inserted, the small, round, black spot is observable; pulse 80; vomiting as before. After this the pulsation returned in the whole tumour, which, though much increased, resumed more of its original oval form, but became very prominent, the sterno-mastoid muscle being on the stretch across it.

A question now naturally presented itself,—should the application of the galvanism be repeated? My own impression decidedly was, that it should not, for should it be followed by a still further increase of size, in addition to its already large bulk, the pressure on the trachea and jugular vein might induce serious, if not fatal results. During a temporary absence in England, my colleague, Mr. Adams, who kindly took charge of the case, had a full consultation upon it, at which Sir P. Crampton was present, when it was decided that further interference by operation in such a constitution would only hurry on the fatal termination of the case.

The vomiting continued as violent as ever, and he died, apparently of exhaustion, on the 8th June, a little more than three weeks after the application of the galvanism. A few days before his death there was no pulsation in the aneurism.

Post-mortem Examination.—There was nothing found in the viscera to explain the vomiting, the stomach being only a little redder than natural, as was also a short portion of the ileum. The substance of the liver did not appear diseased, but it presented a curious malformation, being divided into a number of small lobules, like the kidney of an ox. No appearance of disease in the brain. The kidneys in the first stage of Bright's disease. The heart, aorta, and large vessels of the neck, were removed along with the aneurism, and carefully examined; the heart and aorta were healthy. The aneurism was about the size of a large orange, its superior surface was on a level with the upper edge of the hyoid bone, its lower with the

seventh ring of the trachea; it was globular at its anterior two-thirds, flatter behind, between which two portions, on the outside, was a deep groove, partly filled by the edge of the sterno-mastoid, and partly by the jugular vein, which was quite flattened and impervious. The par vagum nerve ran over the posterior surface, at first expanding out into a fibrous arrangement, afterwards so flattened on the surface of the tumour that it formed a membrane a quarter of an inch broad, so thin and so closely applied, that it required delicate dissection to raise it off the wall of the aneurism, and trace it on to its trunk above the tumour, where it became normal.

The sac of the aneurism felt strong and rather thick, particularly in front, and as if its contents were in a great measure solid; posteriorly it had a softer and more fluid feel. It sprung from the anterior part of the common carotid artery, but the vessel was lost in the tumour, and only traceable a short distance up the lower part of the back. Below the aneurism, the trunk of the carotid was sound, but both external and internal carotids were much reduced in size, and so much obstructed that a probe could not be passed through them into the aneurism.

A section of the aneurism showed the contents to be solid, the centre occupied by clotted blood, of the colour and consistence of black currant jelly; from a quarter to half an inch from the margin the layers were of a pale red colour, and had a fibrous arrangement, exactly resembling muscle; when they were removed the lining membrane was found smooth but uneven.

As far as coagulating the blood in the sac, the application of the galvanism in this case was successful, complete coagulation having been effected by it. From the proximity of the carotid artery to the heart, and the direct course of its trunk (both favouring the rapid current of the blood,) as also from the very free anastomosis with the numerous branches of the corresponding artery, an aneurism in this situation is one least likely to preserve the coagulum formed by the galvanism. In the present instance, likewise, a successful result may have been prevented by the total impossibility of using sufficient pressure to obstruct the current, and prevent its washing away the newly-made clot. To be completely successful, repetition of the operation would have been required; my reasons for not deeming this advisable have been already stated. What I have observed, however, convinces me that in more suitable cases this mode of treating aneurisms will yet be found most valuable.* The sudden and rather alarming increase of the tumour, which occurred during the application of the galvanism, should it be constantly observed, may fairly be brought forward against its use in aneurism situated, as this one was, in the neighbourhood of important organs, which would be

* A case is given in the *Revue Medicale*, for December, 1842, of a popliteal aneurism in a man of seventy, cured by M. Petrequin, of the Hotel Dieu of Lyons, with acupuncture and galvanism, in a single sitting; and several cases have since appeared in the public journals.

very intolerant of sudden pressure, although they may bear or accommodate themselves (as we know they do) to the gradual pressure of tumours.

It is not easy to account satisfactorily for this rapid enlargement; the perfect integrity of the sac shows it was not from extravasation of blood by rupture; moreover, no traces of blood could be discovered. We know that during the galvanic action a quantity of hydrogen is evolved from the negative pole; it would, however, have been scarcely equal to the actual amount of the increase; the sensation, also, was of something more solid than if the contents were gaseous fluid. It now appears to me more likely to have been caused by the galvanic influence extending beyond the sac, and coagulating the fluids in the cellular tissue around it, the coagulated matter having been afterwards absorbed. The size of the aneurism at the time of death was certainly not larger than it would have been in the usual progress of the disease, and if the galvanism had never been applied.

M. Petrequin insists on the necessity of the needles crossing, to produce a proper coagulum. The needles, in this case, though they could be made to touch, certainly did not cross, and yet coagulation was complete. But I have further reasons for believing this is not necessary: I thought that, in performing the operation for the future, it would be as well to avoid, if possible, the entrance of the hydrogen gas evolved from the negative pole directly into the circulation. I therefore suggested to Mr. Fagan to make the experiment of putting an albuminous fluid into a small bladder, and to insert the positive needle into the fluid; but merely to apply the negative wire to the outside of the bladder. He accordingly filled a small portion of sheep's intestine with one part of white of egg and two parts water, quite full, and without any air. He inserted the positive needle its whole length through the gut into the fluid, and applied the negative wire merely to the outside of the sac, and succeeded in producing a large tea-spoonful of mucous-looking coagulum, without a bubble of hydrogen in the fluid inside, but many adhering to the outside, and to a silver plate on which the sac was placed. We have no grounds to say the entrance of hydrogen into the blood is injurious; but the fact that coagulation can be produced without its necessarily being present is interesting. The condition in which the par vagum was discovered may, perhaps, explain the incessant vomiting. It is scarcely possible to suppose that a nerve so closely connected with the functions of the stomach could be so much deranged in structure without considerable gastric disturbance.—*Dub. Quarterly Journal of Medical Science.*

Observations on the Oxalic Diathesis, and the Influence of the Rhubarb Plant in its Production. By JOHN S. BARTRUM, Esq., Surgeon, Bath.—Having for some years been in the habit of paying attention to the general and chemical conditions of the urine, it was with much pleasure that I perused the paper of Mr. Wilson, inserted

in No. 35 of the *Provincial Journal*, (September 2, 1846,) especially from having, on several occasions within these two or three last years, noted in my own person, the effects on the urine of the rhubarb stalk and other articles of diet. The portion of urine passed after rising in the morning was always examined by the miscroscope without heat, as the shortest and not fallacious mode.

Being apparently in the most perfect health, excepting rather overworked, and as far as unlike a patient suffering from oxaluria as possible, at first I could scarcely believe myself to have passed oxalate crystals, till confirmed in my supposition by Dr. William Budd, who immediately remarked that I must have been eating rhubarb, which, however, had not been recently the case. This induced further and oft repeated examinations, the general results of which I can only now give, having not long since destroyed the daily records, considering them as not worth keeping.

While passing the smaller oxalates, and then partaking freely of rhubarb, the first effect was generally to increase the size and quantity of oxalates thrown down, with the occasional addition of some of the reniform bodies; the diet being continued, the crystals of all shapes increased in size, especially the latter, till on two occasions they almost solely were passed. However, after a day or two, the oxalates diminished and then disappeared, although rhubarb was still partaken of; this may probably be explained by having regarded the appearance of the oxalates, as sure warning that I must give myself more relaxation. The results have been similar on two or three occasions, when from continuous exertions I have expected their presence and found them; but I have never been able to induce their appearance by the freest use of rhubarb, except in the very fine cuboid forms, for a day or so, unless they were previously present.

If Mr. Wilson continue his inquiries, I think he will find, that any article of diet, adding to the irritability of the kidneys and bladder, will induce an additional secretion of the oxalates; for I always found, that partaking freely of water-cresses added materially to the quantity of oxalates, provided I were already passing them, from the irritation of the bladder, caused by the abundant secretion of free lithic acid. Whether the elimination of oxalates, as well as of lithic acid, was due to the water-cresses, or the common salt accompanying them, I cannot say. That must be left for future investigation.

It will be found almost universally, that cases characterised chiefly by deposits of oxalates are combined with an asthenic condition of the assimilating organs; some of them corresponding closely with those caused by the excretion of an abnormal amount of urea, the urine then being dense and loaded with lithates, while others, from the excessive excretion give rise to a suspicion of diabetes mellitus, so much so, that of the many specimens sent me for examination, where a large quantity of urine is voided, the greater proportion are of low specific gravity, with some few small oxalates, and often swarms of vibriones. These latter cases, however, are essentially cases of want of nervous power without any specific ailment, sometimes passing

phosphates, sometimes oxalates, according to the varying condition of the system, which always displays a very reduced vitality.

In this, as in all other diseases of the urinary organs, where chemistry is called into our aid, there is great danger of their being treated as though the body were a mere laboratory, wherein we could modify these secretions at our will, overlooking the essential cause of the ailment; but, however useful and necessary such examinations may be, it behoves the practitioner carefully to eschew being implicitly guided by them; as some cases of this disease are treated successfully by alkalies, others by acids; some by restricted, others by a generous diet; for though medicinal remedies are most useful, and in the majority of cases requisite, they will be of little avail, if not well supported by carefully-applied general and dietetic measures.

I think that the size of the crystals of oxalates passed will often afford a good indication of the extent of the oxalic diathesis. If the crystals, especially the reniform, be large, distinct, much inclined to become clustered, crystalize on the hairs, &c., much oxalate of lime is passing. As the case improves, the crystals lessen in size and numbers till at length they become undistinguishable, except to the educated eye. Though it is unusual, the reniform bodies may continue to the last, when, in some positions, they may become in appearance almost like a blood-corpuscle; in the majority of cases these crystals are not to be found.

It has been suggested (by whom originally I cannot learn,) that these reniform bodies are not oxalate of lime, but lithic acid, modified in shape by the presence of oxalic acid. This can scarcely be, for I have, with several different specimens, macerated the whole deposit in liquor potassæ, to get rid of any free lithic acid; then, in diluted acetic or muriatic acid, whereby the phosphates and lithates are separated; yet both the cuboid and reniform crystals have remained quite unaltered. I have not succeeded in throwing down crystals of oxalate of lime, when a deposit of free lithic acid and oxalates was dissolved in sulphuric acid, and the former separated by the addition of water, perhaps from sufficient care not having been taken in the matter.

Should it be desired to separate any deposit of these salts for examination, it is most easily effected by decanting the upper layers of fluid, adding distilled water to the remainder, with or without potass, or acetic acid. The oxalates soon fall to the bottom, and may be readily collected on a watch-glass, without heat or any other process that could modify its composition after leaving the body. By careful manipulation you may obtain and weigh all the crystallized salt in a given specimen. To those not conversant with the salt naturally deposited, yet desirous to examine it, one of the best modes of learning all its usual shapes and sizes is to add a dilute solution of oxalic acid to fresh healthy urine, when after some hours the characteristic crystals will be found in abundance.

I do not know whether this city more abounds with cases of this disease than most others, but among its labouring population, of the

class next above the poor, such as policemen, schoolmasters, carpenters, &c., (some hundreds of whom come wholly under my observation,) dyspepsia, of an atonic character, and marked by the pallid, depressed, emaciated countenance, with more or less hypochondriasis, pain of the side, (often of great intensity,) or of the back, and the passage of oxalate crystals is most rife, though in most cases readily amenable to judicious treatment. From my own observation this form of dyspepsia does not seem so common among the women of this class as among the men, even in those, wherein from their appearance and symptoms I had fully expected to find it. Of the presence of the oxalates in the more acute or in cutaneous diseases, I can say nothing, not having examined them for that purpose.—*Provincial Med. and Sur. Journal.*

TRANSACTIONS OF THE PHARMACEUTICAL SOCIETY.

On Extract of Indian Hemp. By ANDREW ROBERTSON, Esq., Professor of Chemistry to the Medical College, Calcutta.—A number of pounds of the extract of hemp were prepared by me—I think upwards of thirty in all—for the purpose of having its medical properties fully tested by European medical men. A quantity went to Paris, another to Berlin, another to London, sent by different parties, and for my share of the matter I sent four pounds of it to Scotland, part of which went to you. I do not care about making more of it, as its preparation is most tedious and troublesome, in which I was tormented by the excise regulations of the country, for both the plant and the spirits used are the subject of heavy duties and stringent precautions, and the cost price of the extract to me, counting nothing for trouble, was fully fifteen shillings per lb. Dr. O'Shaughnessy made his extract with alcohol, in a Papin's digester, at a heat above the boiling point of alcohol—the extract so obtained is brown; mine is of a deep green, and gives a grass-green tincture to alcohol, and has six times the activity of the brown, as ascertained by trial on hospital patients. If a speedy effect is desired it is given as a tincture; if a deferred and protracted, as a pill.

As the process by which it was prepared is an idea of my own, since copied by others, and which probably may be claimed by them afterwards, I may mention it to you. It is a variation of the process of percolation, alcohol in vapour being the agent. A still was charged with strong spirits, and its nose introduced into the side of a cask in which the plant was pushed.

The vapour of the alcohol, and alcohol at a boiling heat thus acted on the plant, instead of cold alcohol in the usual mode of percolation. First issued a thin tarry matter containing much resin latterly, a brown liquor containing little resin but much extractive. At this point water was substituted for the spirit in the still, and as much as possible of the spirit retained by the plant thus expelled from it. From the bottom of the cask a pipe led to a common condensing worm. Part of the alcohol was recovered from the fluid by distillation, the rest dissipated by evaporation in Wedgewood ware on a

sand-bath, not exceeding the temperature of 150 deg. Fahr. One hundred weight of the plant was used at one operation, and about eight pounds of extract obtained. The operation was conducted so slowly as in all its stages to last a fortnight.

The extract of hemp has been long known in the East, in a most widely extended range of countries, under the names of Gunjah, Churrus, Hashish, Beng or Bang, the emerald cup of Haider, &c., and under every name renowned for its exciting and narcotic qualities. It is used by the natives here in the same way as opium is by the Chinese, and on that account is the object of fiscal regulations and duties. It is known throughout all India, Arabia, Syria, and Eygpt. You will find it in the *Arabian Nights*, translated by Lane, under the name of Beng, as the narcotic used by Haroun Alraschid, and others. There cannot, therefore, be a doubt that it is a drug nearly as active as opium.

The inactivity of the drug, therefore, prepared in Britain, I can attribute only to faulty preparation and overheating, or to its being made from old and decayed plants. The good plant is of a greenish brown, the heads loaded with a sticky resin; the bad is palish-brown and does not adhere to the fingers. The good extract gives a grass-green tincture, the bad a brownish. My extract was made from dried plants of good quality, as it cannot be readily obtained fresh in Calcutta.

Mr. Fordred stated, that it had recently come to his knowledge that some of the extract, sold in London as extract of Indian hemp, was made from the plant grown in the neighborhood of London, and he believed possessed but little, if any, of the narcotic properties of the Indian plant. The extract made from the hemp (*Cannabis sativa*) grown at Mitcham, was of a green colour, and being apparently an aqueous extract contained but little resin, while that prepared from the plant grown in India contained a large proportion of resin. He thought it important, as many medical practitioners in different parts of the country were trying the efficacy of this remedy, that they should be cautioned to be particular in obtaining the extract of the *Indian* hemp.

Mr. Redwood said, that much of the extract made from the hemp plant imported from India, as well as the extract which had been imported ready made, was found to possess but little narcotic power when tried in this country; certainly they had not realized the expectations which were formed from the accounts of its action given by medical men in India. Dr. O'Shaughnessy, when last in this country, had admitted that the extract, even some that he had brought from India himself, had failed to produce the effects he anticipated, when tried in our hospitals; and he had undertaken, on his return to India, to have some extract very carefully prepared, and sent over to this country. Mr. Squire had received a quantity of this extract, and he presumed it was that alluded to in the paper just read, as having been made by Mr. Robertson.

Mr. Bartlett had witnessed the effect of a very small dose of extract of Indian hemp, obtained from Mr. Squire, on one of his assistants,

and the action was that of a powerful narcotic. The young man stated that he felt all the symptoms of intoxication.

Dr. Ure had been recommended the use of the extract of hemp by his son; but although he tried it for some time, he never experienced the slightest effect from it. The extract was the same as the above, having been obtained from Mr. Squire.

The Chairman thought that the present state of medical knowledge, in reference to the action of Indian hemp, was very unsatisfactory and imperfect.—*Dublin Med. Press.*

Dilatation of the Heart consequent upon Teetotalism. By RICHARD CHAMBERS, M. D., Physician to the Essex and Colchester Hospital.—*Case* I. A gentleman, aged fifty of good constitution, and accustomed to live freely, became a convert to teetotalism. For a period of six months subsequently, there was no perceptible alteration in his state of health; but about this time he became subject to attacks of nervousness and paroxysms resembling angina, which gradually increased in frequency and intensity up to the time that I visited him. I saw him on August 16th, in consultation with his ordinary attendant. In addition to the above particulars I ascertained, that repeatedly in the course of the night and day, he was subject to attacks of breathlessness, that compelled him to rush to an open window to relieve the sense of impending suffocation. In the intervals he was quite cheerful. He complained of pain in the back of the head; pulse 84; bowels regular; urine copious. On examination of the thorax, (which was extremely well formed,) I found the lungs perfectly sound; the action of the heart was regular, and its sounds unusually clear, but there was scarcely any impulse. He had been bled the day before, principally at his own request,) but with no relief.

As he had latterly been using a restricted diet, I placed him upon meat daily, with four glasses of good old port, and prescribed five grains of the carbonate of ammonia every four hours, and three grains of the sulphate of quinine thrice a day.

Under this line of treatment he began gradually to amend. At a subsequent period the sulphate of zinc was prescribed for him, and with the alternate use of zinc and quinine, and an increased allowance of wine, his health has been sufficiently restored to enable him to participate in the manly and trying game of cricket.

Case II. Henry Taylor, aged 30, a working gardener, applied at the Essex and Colchester Hospital, June 4th, 1846, complaining of headache and general weakness. He was of middle stature, and of a full habit, presenting a slightly bloated appearance. His appetite was good; pulse 78; bowels regular. On stethoscopic examination, the lungs were found to be perfecty healthly; the heart's action was regular, the sounds clear and healthy, but there was only a very slight impulse. He slept indifferently. For the last six months has been a teetotaller, but denies that he was a drunkard previously.

℞ Pil. saponis; rhei; utrq., gr. iiss. M. Fiat pilula omni nocte sumenda.

℞ Ammon. carb., gr. v.; tinct. camph. comp. dr. ss.; Aquæ, oz. j. M. Sumat ter indies.

15th. His wife applied for medicine for him to-day, and I found that my suspicions as to his intemperate habits were correct.

℞ Pil. saponis, gr. v.; omni nocte. Rept. haust. To have a little gin-and-water after dinner.

This treatment was continued up to the last fortnight, and being free from complaint he discontinued his attendance.

I bring these cases before the association as examples of dilatation of the heart, consequent upon the adoption of teetotalism. The *modus operandi* appears to me to be the yielding of the muscular structure of the heart, in consequence of the less stimulating character of the blood; but, in addition to this, it must not be overlooked, that another element may also be in operation,—I mean an actual increase in the quantity of blood to be circulated, as I have invariably found that a great increase of appetite accompanies teetotalism; not a healthy appetite, but a morbid craving for food, and to oppose which opium is frequently resorted to.

These cases present the principles of the treatment to be adopted, and there is but one caution necessary, and that is, to draw a careful distinction between actual determination of blood to, and merely congestion of blood in, the brain. In the cases just related the headache was referred to the back of the head, and appears to have arisen from venous congestion, but on the stethoscopic induction I wish to place the chief reliance.—*Ibid.*

Insanity in Eygpt.—The following extract from a clever work just published, conveys a wretched picture of the condition of the insane in Egypt. It is to be hoped that Ibrahim Pacha was not allowed to leave this country without witnessing the treatment pursued at Hanwell and others of our best conducted asylums.

"The saddest sight I have seen in Cairo is the Mooristan or madhouse—misery mitigated by nothing but its own oblivious antidote—'Razing the written troubles of the brain.'

"A horrid court-yard, surrounded by tiers of iron cages, where men are cooped, and sometimes chained, with less of space, air, light, and cleanliness, than are allowed to a wild beast in one of our travelling menageries. Poor helpless wretches!—the moping idiot, the gay madman, the furious maniac,—sullen and weeping, laughing and singing, grinning, howling, and tearing behind the bars;—of all the fearful 'ills that flesh is heir to,' this overthrow of reason is surely the most painful to look upon.

. . . . . omni
'Membrorum damno major Dementia.'

I saw one poor patient brought out of his den and set at liberty; he lay for a few minutes upon a filthy mat on the stone pavement, his features drawn, lived, and stiff—a shudder passed through his wasted frame, and he was dead!

"After several visits, I have established an acquaintance with two or three, and make them presents of bread and tobacco, for which they are very eager. One captive, quiet, self-collected, and hand some featured, tells a long well-sustained story of female jealousy and a family conspiracy to obtain his property and confine him for life: he stoutly maintains that he is as much in his senses as any man in Muzr—a strong reason for doubting the tale, which if true, would have driven a philosopher crazy. My new servant, *Black Omar*, who stands interpreter, believes every word, and thinks it no uncommon case; he tells me that *snake broth* is the 'sovereignis't thing on earth' for these mental maladies, and that no other medicine is used in the Mooristan, save the iron-chained collar and the bastinado."—*Nozrani in Egypt and Syria.*

MANCHESTER PATHOLOGICAL SOCIETY.

Retroversion of Uterus—Retention of Urine for fifteen days—Fatal Inflammation of the Bladder.—Mr. DUMVILLE presented the genito-urinary organs of a woman, aged 22, who died in the fourth month of pregnancy from acute inflammation of the bladder consequent on retroversion of the uterus. The body was examined twenty-four hours after death. The bladder contained some urine; its peritoneal covering was thickened and opaque, and had contracted adhesions with the surrounding intestines. There was also some muscular hypertrophy. The whole inner surface was thickly coated with false membrane, which hung in shreds, and was mixed with earthy matters. The uterus was firmly impacted in the pelvic cavity; it contained a four months' fœtus, and the right ovary had within it the corresponding corpus luteum.

The woman had borne two children, and in the latter months of the second pregnancy suffered from prolapsus of the Uterus, which disappeared after delivery. She became a third time pregnant, and during the entire four months preceding death she had suffered from pain in the pubic region, and had also the sensations of prolapse, without, however, any well-ascertained descent of the parts. Twenty-two days previous to death, whilst occupied with manual labour, she experienced a sudden and violent pain in the hypogastrium, with great desire, but inability, to void urine. A surgeon drew off three pints of water, but neglected to repeat the operation for sixteen days. During this interval the bladder was never properly evacuated, the urine mostly escaping guttatim, and with extreme suffering. She was then first visited by Mr. Dumville, who, on examination, discovered a retroversion of the uterus, with the os resting on the symphisis pubis. Marked symptoms of acute inflammation of the bladder presented themselves, which he treated in the usual manner. On introducing the catheter, he withdrew a large quantity of urine, which was strongly ammoniacal, and yielded albumen plentifully. It was of a blood-red colour, and 1012 specific gravity. Microscopically examined, it was found to contain blood-discs, pus globules and crystals of neutral triple phosphate of ammonia and magnesia.

The inflammation of the bladder in this case was, in a certain sense, attributable to the retroversion of the uterus, but still more clearly to the neglect of periodically withdrawing the urine by catheter; for the distension caused by the retained urine, and its irritating properties, determined the fatal issue; so much the more to be regretted, seeing the rules for the management of similar cases have been so distinctly defined that no apology remains for the omission of putting them into practice.—*Dub. Med. Press.*

Cancer of Pylorus—Obscurity of Symptoms—Suppuration of Gall-bladder.—Dr. Francis sent for exhibition a fine specimen of cancerous ulcer which involved the whole of the pylorus. Its surface was ragged and burrowing, the margins raised and everted; in length it measured four inches, in breadth two. The stomach was pale, and unusually small; the duodenum was of a deep slate colour.

It was taken from the body of a man, æt. 60, who, within the last eighteen months, had suffered much from privation and severe domestic troubles. He was under the daily and close observation of Dr. Francis for the last six months of his life, during which time he gradually emaciated. There was never any vomiting or complaint of pain, or other symptom indicative of local disease, but he was throughout the subject of a settled gloom, under the influence of which he seemed to be slowly sinking. A few weeks before death he contracted diarrhœa, which was then epidemic.

Dr. Francis considers that a very interesting and instructive feature in this case was the absence of local manifestations of disease, notwithstanding the existence of so formidable a lesion in a part of the stomach so almost uniformly attended with vomiting or pain. It added another to many instances he had had the opportunity of observing at the workhouse, of the fact, that where strong grief had taken possession of the mind it sometimes happened that sensibility seemed to have become so impaired that the symptoms ordinarily resulting from local irritation had not been developed. In several inspections of persons who had died whilst labouring under the melancholic form of insanity, or under that particular state of mind which, in popular language, is described as "a broken heart," he had never failed to find organic disease of some part or other, however obscure its existence might have been during life.

Along with the cancer of the stomach, the gall-bladder was found to be distended with a puriform fluid untinged with bile, which, under the microscope, was seen to contain pus, mucus, and inflammation globules, and behaved as pus on the addition of liq. potassæ. Several superficial granulating ulcers were observed upon the inner surface of the viscus, and, a short distance within its duct, was firmly impacted a round calculus, nearly a third of an inch in diameter, and composed chiefly of cholesterine. The liver did not seem to be unhealthy, and there was no cancer elsewhere than in the stomach.

Ibid.

Two cases of Spina Bifida—one of them Cured.—Mr. Dumville exhibited a preparation of spina bifida taken from a child aged five months. The arrest of developement happened in the spinous processes of the third, fourth, and fifth lumbar, and first and second sacral vertebræ, which gaped widely apart. The sac in which the cauda equina partly expanded was large enough to contain an ounce of fluid. The tumour was punctured at the urgent instance of the friends, but at a period when the failing powers of life offered scarcely a hope of recovery. The child died with the usual symptoms.

Mr. Dumville related the particulars of another case, in which the congenital deficiency was situate in the same locality. He evacuated the sac by puncture, and the recovery was complete. The child, which was nine months old at the time of the operation, has now attained eighteen months; and its health is unexceptionable. The operation was quickly followed, in this instance, by a profuse perspiration; the face immediately became deeply congested; and there was much derangement of the stomach, attended with vomiting. The child was very fretful, had excessive twitchings, but no distinct convulsion. When the sac was quite empty all the symptoms were aggravated; but on becoming again distended with secretion, which occasionally took place in consequence of mechanical obstruction of the aperture, the symptoms underwent amelioration. The discharge of fluid, with more or less of the symptoms described, having lasted fourteen days, the orifice then healed over, and no further secretion of serum following, the child convalesced without any relapse. This case he adduced rather as an exception to, than as an example of a general rule.

Judging from the aggravation of the symptoms whenever any excess of the fluid happened to drain off, it would appear that too much precaution cannot be taken in order to secure the evacuation of the sac as gradually and in as constant a manner as possible, in these cases, and that the plan of operation most suitable for the attainment of this desirable end should be adopted, and, above all, timely put in practice.—*Ibid.*

Treatment of Bursal Disease of the Knee-joint. By John Richard, Esq., of Leamington.—The plan of passing a bit of sewing-silk through the centre of the tumour I have practised for the last fifteen years. It has never failed in my hands, and I do not think that I have ever allowed the silk to remain longer than through the third day. When the inflammation has been very considerable, I have always enjoined rest, and applied a few leeches, followed up by a liq. plumbi lotion, previous to introducing the silk.—*Ibid.*

History of a case of remarkable coloured Secretion from the Skin. By C. D. Purdon, M. D., Belfast.—Barbara Murphy, æt. 40, an inmate of the Infirmary attached to the Belfast Charitable Society, the mother of two children: catamenia regular up to the last six months; attributes the first commencement of her state to a fever with which she was

attacked about twenty years ago, immediately after which she experienced a pain in the ball of the great toe of the right foot, terminating in a swelling of the same part. Both ankles became painful and swollen; a short time after this ascites supervened; all these symptoms subsided on her becoming pregnant, during which time she enjoyed perfect health. About three weeks after her confinement she was seized with pain, accompanied with swelling, in the joint of the first finger of the right hand, which gradually attacked each joint of the upper extremities in succession, and spread thence to the lower, commencing above. After some time the wrists, ankles, and smaller joints of the hands, became distorted and nodose, in which state they have since continued. From this time nothing remarkable was to be observed in her state, but she continued to suffer from occasional attacks of rheumatism, and was almost always confined to bed, until three years ago, when, during an attack of rheumatic fever, the heart for the first time became affected, after which anasarca and hydrothorax supervened. These were partly relieved by a severe diarrhœa, but on its subsidence both became greatly aggravated; however, they were not only kept in check but much ameliorated by the different remedies employed. Some months ago they returned with such severity as to threaten a sudden termination of her life; when at the worst a miliary eruption appeared on the trunk, greatest in the epigastric region, from which a clear serous discharge flowed in such quantities as literally to wet the bed; there was also a great moisture on the legs, which had blisters on them, in place of the eruption; this of course was attended with the greatest relief, and the breathing became almost free. The discharge continued for some days, after which it ceased, and symptoms of dyspnœa returned with great severity for fourteen days, when, after having a sense of prickling over the whole body for about twelve hours, the eruption again appeared, attended with the discharge, and causing the same relief. In this state of alternate relapse and recovery she has been for the last two months, the duration of the paroxysms being either eight or fourteen days; but the most curious point in the case is, that the serous discharge has changed very much in its character for the last four or five attacks, being nearly alternately blue and straw-coloured, or yellow, almost like pure bile. When the blue discharge appears she is aware of its advent by a mouldy smell and a prickly sensation, which precedes it invariably for twelve hours; the yellow is not attended by either of these. The blue always appears along the posterior part of the chest; the yellow generally proceeds from the abdomen and back of the neck, and rarely from the back: the blue never has appeared on the abdomen; the two colours have been procured from the different parts at the same time. The discharge from the extremities has never been coloured. In place of catamenia there is a discharge of a reddish green colour. As to treatment every remedy has been tried without relief to any of the symptoms, either of the rheumatic or cardiac affections The yellow colour is tolerably permanent, the blue, however, fades; she has not taken any preparation of iodine for some years, and at present uses only opiates and saline draughts. In addition, it is worthy of remark, that a very peculiar elongation of the *quick* under each great toe nail has taken place. This became manifest on the nail being paired,

and now appears like a loose fold of flesh, which hangs over the ball of the toe, and resembles in shape the bony nail.—*Dublin Quarterly Journal of Medical Science.*

Extirpation of a Tumour from the Antrum Maxillare, with removal of the superior Maxillary Bone, including the Palate Plate. By C. Aston Key, F. R. C. S. E., Senior Surgeon to Guy's Hospital, Communicated by Sir Philip Crampton, Bart., F. R. S., &c.

Merrion-square, Sept. 20, 1846.

Dear Sir,—By the kind permission of Mr. Aston Key, I have the gratification of communicating to you the particulars of a case of tumour in the antrum maxillare, which was successfully removed by that excellent surgeon. The tumour was of great size, and must soon have proved fatal, as it had already pressed down the soft palate to such an extent as materially to interfere with deglutition. The aspect of the young woman was healthy; the tumour seemed to be of a firm nature; and there was no soft or fungoid-like protrusion through the nostril. These circumstances, no doubt determined Mr. Key to undertake the operation,

I remain, dear Sir, faithfully yours,

Philip Crampton.

To the Editor of Dub. Quarterly Journ. of Med. Science.

St. Helen's-place, Aug. 25, 1846.

My Dear Sir,—The operation of removing the superior maxillary bone in the young woman whom you saw at Guy's was done a fortnight ago, and she is now quite convalescent; so far the case, as you predicted, has proved quite satisfactory. The whole of the bony palate on one side, the nasal process, and the bone, with the exception of the floor of the orbit, were taken away, and exposed a large tumour of simple structure, which, readily turned out from the back of the antrum. There was no difficulty in the operation, and the diseased mass was detached with ease from its bed. On examining the structure of the tumour we could discover no trace of malignant disease; it consisted of fibro-albuminous deposit, and, being of so benign a character, there is every prospect of its not returning. The incision in the cheek, which extended from the outer canthus of the eye to the angle of the mouth, healed by adhesion. I thought that you would like to know the result of the case.

I am, dear Sir, yours most truly,

C. Aston Key.

To Sir Philip Crampton, Bart.

Dub. Quart. Journ. of Med. Science.

Medical Court Martial.—A kind of medical court-martial has been lately held at the hospital of Val de Grace, under the presidency of Colonel François, to try a surgical pupil of the hospital on a charge of having caused the death of a patient by giving him an overdose of opium.

The deceased, a military patient, was admitted into the hospital for ophthalmia, and the physician prescribed for him a sudorific syrup; but it so happened, that the first dose which was given to him con-

tained about *an ounce of the tincture of opium!* (thirty grammes.) The man swallowed it, and died in three quarters of an hour, violently convulsed. The minister of war ordered an investigation of the circumstances.

M. Fretin, the accused, was interrogated on the allegation of his having labelled a bottle, containing tincture of opium, "sudorific syrup," but he denied that he had made any mistake, and contended that he was not responsible for the result. The accused was defended by counsel, and the court, after hearing the defence, acquitted him of the charge.—*Journal de Medecine..*

*** The case is chiefly remarkable from the fact that it is perhaps the most rapid instance of poisoning by opium on record.—*London Med. Gaz.*

French Medical Students.—By a decree just issued from the University of France, it has been ordered that, after the 1st of November, 1846, all medical students shall undergo an examination at the end of each of the three years of study. In the first year, on physic, chemistry, and natural history; in the second year, on anatomy and physiology; and in the third year, on pathology. There will be three examiners, and four students at each examination. The examinations will take place between the 15th of July and the 1st of August, and any student who fails to satisfy his examiners, cannot again present himself until the following November. Unless he then passes, his ticket for the ensuing quarter will be withdrawn. If again rejected in November, he must resume his studies for a year.

These rules are severe, but they embody a much better method of testing the knowledge of a candidate than the mere forms of examination which are gone through in this country, upon all kinds of subjects, at one sitting of an hour's duration.—*Med. Gaz.*

Phosphorescence of the Human Body.—The subject of this case was a male infant sixteen months old. The child had suffered from teething, and had been casually seen by Dr. H. M'Cormack, of Belfast. An emetic was administered, and an irritating liniment rubbed on the breast. The nurse, in raising the child in bed at night, obsreved a phosphorescent light about the hips, both before and after the candle had been lighted. The legs were also observed to be luminous for a short time. From what Dr. M'Cormack could learn, the appearances very much resembled that produced by phosphorized oil, but none of this had been employed. The phenomenon occurred only once. The mother had, however, observed, that on one occasion a spark (electrical) had flown to her hand from the infant's body. Cases of human phosphorescence in the living body are rare, and the fact recorded by Dr. M'Cormack is, therefore, interesting.—*Ib.*

Rape on an Idiot. Reg. v. Ryan.—The prisoner was indicted for rape. The prosecutrix was an idiot, and when asked questions in the witness-box was evidently unconscious of their purport, and not in a condition to understand right from wrong. Platt, B., interrogated her father as to her general habits, whether they were those of decency and propriety, and an answer in the affirmative was returned.

Platt, B. in summing up. The question is, did the connection take place with her consent? It seems that she was in a condition incapable of judging, and it is important to consider whether a young person, in such a state of incapacity, was likely to consent to the embraces of this man; because if her habits, however irresponsible she might be, were loose and indecent, there might be a probability of such consent being given, and a jury might not think it safe to conclude that she was not a willing party. But here the presumption is that the young woman would not have consented; and if she was in a state of unconsciousness at the time the connection took place, whether it was produced by any act of the prisoner, or by any act of her own, any one having connexion with her would be guilty of rape. If you believe that she was in a state of unconsciousness, the law assumes that the connection took place without her consent, and the prisoner is guilty of the crime charged. The prisoner was convicted. —*Ib. from Law Times.*

Delirium Tremens in an Infant.—A little boy, five years of age, swallowed by mistake a large quantity of brandy. Vomiting speedily followed, and he passed a restless night, sleeping only towards morning. On awaking, it was observed that he had tremor of the hands, and that he could not hold a cup steadily. Convulsions with cramps ensued. The pulse was slow, the look timid, the pupils dilated, and the countenance pale. Dilirium supervened, and there was dysuria with great thirst. A cataplasm was applied to the abdomen, and calomel and jalap were administered. The symptoms abated about the middle of the day; but towards evening there was a return of the tremors with other nervous symptoms. An opiate was exhibited, from the effects of which the child slept soundly, and on awaking the whole of the symptoms had disappeared.—*Gaz. des Hôp.*

A novel method of detecting a needle by means of Magnetism, and its extraction. By R. T. Gill, of New York.—On Friday, November 13th, 1846, Miss D., while kneeling upon the carpet run a cambric needle into her knee, and broke it. The usual ineffectual search having been made, it occurred to me, that a magnetic needle would detect it, and if the needle could be charged, its poles might be located. For this purpose, the north pole of a horse-shoe magnet was drawn several times from above downwards, over the point of entrance. Then having charged a darning needle, suspended by means of a thread, and holding it near the point where the cambric needle had entered, it was found to have slight polarity.

The horse-shoe magnet was then bound below the knee, diagonally

across, so as to present the north pole towards the point of entrance, that the needle might thus be charged more effectually by induction. On the 16th, a proper magnetic needle having been procured, and presented to the knee, its north pole was strongly attracted to a certain point, which was marked with ink; then on presenting the south pole, and moving it up about three-quarters of an inch, it was strongly attracted, and that point also marked. An incision at right angles, bisecting the disc between the two marks, struck the needle at its centre. Having passed a curved needle under it, so as to fix it, then cutting down upon one of its points, it was extracted.

The needle had moved more than its length below the place of entrance, caused somewhat, possibly, by the attraction of the horse-shoe magnet.—*N. Y. Annalist.*

Upon the Efficacy and Mode of Administration of Belladonna and Atropia. By W. R. Wilde, M. R. I. A., Surgeon to St. Mark's Ophthalmic Hospital.—One of the greatest improvements in the oculist's materia medica of late years has been the introduction of the alkaloid denominated Atropia, which, we believe, we were the first to introduce into practice in this city, upwards of two years ago. It was procured for us by Messrs. Bewley and Evans, who have solutions of it according to our formulæ, of the following strengths: one grain, two grains, and three grains to one drachm of distilled water, and three drops of spirits of wine, and numbered 1, 2, and 3. The salt is rendered soluble by the addition of a drop of dilute nitric acid, and the spirit is added to make the solution keep.

A single drop of number 1 placed upon the conjunctiva of the lower lid (where it causes neither pain nor irritation,) in a healthy eye, dilated the pupil, in a period of time varying from five to fifteen minutes, to double, or even more than the ordinary medium size, and will retain it so, upon the average, from four to five days; at which period it generally begins to contract, but the pupil does not fully regain its previous size, nor the iris its mobility, till the sixth or seventh day. There will be, no doubt, exceptions to this rule, particularly in cases where there may be such an idiosyncrasy present as would render the eye susceptible to the action of the atropa belladonna used in any form, and perhaps keep the pupil permanently dilated for months. To counteract this effect of the solution number 1, we have employed upon the second and third day after its application those remedies which generally excite the pupil to contract, such as sudden exposure to strong light, the application of electro-magnetism, the use of opium, and the application of the vinous tincture of that medicine upon the conjunctiva; but each and all these means failed to lessen the size of the pupil, in many instances, until the end of the third, or fourth, or fifth days. Solutions number 2 and 3 produce a more decided effect upon the iris, and in a shorter space of time, and retain the pupil dilated for a longer period—even to the eighth or tenth day. When the object is to keep the pupil in a state of permanent dilatation, as in cases of iritis and aquo-capsulitis, as well as to try and break up recent adhesions between the iris and lens, or to withdraw the iris

from protruding through an aperture caused by a wound or ulcer near the centre of the cornea; in all cases of central cataract; where the cornea is opaque in its central portion, or that a portion of the pupillary margin of the iris is attached to the back of the cornea, after the distission of a cataract; or, in fact, in any case in which we wish to produce permanent or complete dilatation of the iris, the solution of atropia will be found much more efficacious than the usual mode of applying the extract of belladonna externally. It is, moreover, much more cleanly, and is not liable to the objection urged against the latter, of producing an unpleasant eruption around the brow on which it is applied, and it is preferable to the ordinary mode of placing a few drops of the solution of the extract between the palpebræ, inasmuch as it causes no pain nor irritation.

In cases, however, where there is much conjunctivitis, or even deeper seated inflammation, attended with lachrymation, present, it does not possess the immediate and marked power over the iris which it does in the healthy eye, and its effects pass off much sooner; and this remark is applicable even to the three-grain solution. It is possible that in such cases the mucous discharge, and particularly the lachrymation which is present, may dilute it too much, or the morbid irritability and increased vascularity of the organ may render it less susceptible of the local application of this remedy than it would be in an otherwise healthy condition, therefore, in cases of violent irritic inflammation, the syphilitic for instance, where the disease had considerably advanced, and extensive exudations of lymph had taken place, we would not solely depend upon the atropia solution, but likewise apply the extract round the orbit. In cases of recent protrusion of the iris through the central portion of the cornea, the result either of injury, or rupture from ulceration, &c., and when there was no great irritability and blepharospasmus present, we have applied the strong atropia solution externally, by means of a small portion of linen rag wet with it, and retained for a short time upon the closed eyelids, with the most happy results.

We may here remark that the benefits arising from dilatation of the pupil have not been sufficiently attended to in the general treatment of ulcers of the cornea. We have, on several occasions lately, been able not only to save the eye, but even to prevent adhesions between the cornea and iris (*synechia anterior.*) and consequent blemish, by means of the judicious application of the preparations of belladonna. In cases of rupture from ulceration, when we have seen the patient shortly after the rupture occurred—and in many of those instances hernia of the iris had absolutely taken place—we at once applied the atropia solution, closed the lids, kept them in that condition with isinglass plaster, and then applied a large pledget of lint smeared with the extract of belladonna over the eye and brow, and retained it in position by a light bandage, at the same time that we employed, when necessary, local depletion by means of leeches on the temples and over the malar bone, together with blistering, and constitutional treatment calculated to lower the inflammation and prevent the further spreading of the sloughy or ulcerative process in the cornea. We keep the eye covered up in this state for thirty-six or forty-eight hours, and have had, in most instances, the satisfaction of finding,

when we came to examine the eye, that the iris had been withdrawn from the wound, the pupil had dilated, and the cornea had united.

There are, however, certain cases in which the use of atropia is inadmissible, namely, in examining the eye for cataract, where we do not wish the dilatation of the pupil to continue longer than a few hours, if possible. In cases where we wish to dilate the pupil before we perform the operation for absorption of the lens, we have more than once seen unpleasant consequences result after this manner. It is well known to operative ophthalmic surgeons, that after the dilatation with the ordinary belladonna extract or infusion, the iris will, during the operation of keratonyxis, partially contract, either from the loss of a few drops of aqueous humour, or from its irritability being excited by the side or flat of the needle touching the margin of the pupil, or from the cataractous lens, whole or in a broken condition, pressing against it: and this condition is rather serviceable than otherwise, for should the lens be inclined to start from its bed, and press forward through the pupil into the anterior chamber, the iris acts as a partition to keep it in its place; while in a few hours the aqueous fluid is regenerated, the iris falls back into its natural position, and can afterwards be kept dilated by the continued external application of the belladonna.

If, however, the pupil has been previously dilated by the atropia, it is thoroughly immoveable, and the lens is liable either to press into it or become dislocated, and get into the anterior chamber. This latter accident occurred to us some time since, in breaking up the lens for congenital cataract. We had ordered a solution (No. 2) of atropia to be dropped into the eye the night previously, and on arriving in the morning we found the iris reduced to a mere ring. The child struggled a good deal, and a few drops of the aqueous liquid were lost during the operation, which consisted in a mere crucial incision into the capsule. On withdrawing the needle we remarked that there was no contraction of the pupil, into which the lens pressed. On visiting the child in the evening it had been so uneasy and complained so much of pain, and there was so much lachrymation present, that we were induced to remove the bandage and examine the eye. The cornea was found to have become plump, from the regeneration of the aqueous fluid, but the iris had remained immoveable, and the lens had started into the anterior chamber, where it caused considerable irritation and subsequent inflammation. It absorbed completely, however, without a second operation, and in a much shorter time than usual.

In cases of photophobia following cataract and other operations on the eye, and attended with myosis, which had resisted the continued external application of belladonna, as well as the strong atropia solution dropped into the eye, we have found the most marked beneficial effects result from the internal administration of the extract of belladonna, given in the form of solution, to the amount of the sixteenth of a grain, from three to five times a-day. This, in the course of thirty-six or forty-eight hours has seldom failed to relieve the pain and intolerance of light, and also to dilate the pupil as far as possible.

In neuralgic affections of the eye, characterized by pain of a burning

description coming on at a particular, and often regular intervals, sometimes at particular hours of the day, yet induced by reading or using the eye in any fine work, and unattended with inflammation or any apparent alteration in the texture or motion of the organ, &c. &c., in which rest, change of air, tonics of various descriptions, particularly iron, and other means, had failed, we have latterly administered belladonna internally, with the very best effect, in doses varying from the sixteenth to the sixth of a grain three times a-day, given in the form of a solution. It may appear strange, but it is nevertheless true, that in some cases of old and inveterate photophobia, as in that form accompanying pannus, or the ophthalmia attended by vascular cornea in discharged soldiers, the internal use of belladonna will be found most efficacious.

We quote the following from a recent Number of the *Gazette des Hopitaux*: "For a long time M. Berrard has employed in his practice at La Pitie, in place of the extract of belladonna, collyria containing the active principle of belladonna, atropia. This substance, signalized for the first time by M. Brandes, who had not, however, obtained it in its pure state, but since isolated by MM. Meire and Seines, presents many advantages over the extract of belladonna; first, by acting with extreme rapidity in dilating the pupil, and by being endowed with great energy, sufficient to produce its effect in a solution of 0·05 or 0·10, in twenty grammes of distilled water, possibly a consideration of little importance in an hospital, but of great value in private practice in enabling one to avoid the employment of black unctions, which disfigure so much, and for which some patients, particularly females, have a great repugnance."—*Dub. Quart. Journ. of Med. Science.*

The "Letheon" at the New York Hospital.—The inhalation of the ætherial compound recently patented by Morton, a dentist of Boston, for the purpose of inducing insensibility to pain during the performance of surgical operations, was tried to-day on a female, from whom two teeth were extracted. A dentist of this city, who has been appointed agent for the above patent—the inhaler and its contents—was present on the occasion. After some explanatory remarks relative to its peculiar properties, mode of administration, etc., he proceeded to exhibit its effects.

The inhaler consists of a glass globe, six or eight inches in diameter; it has two valves, one of which is attached to the mouth-piece and the other to the opposite side. Within this vessel is a large piece of sponge, and an ounce or two of liquid which has the odour of æther. The mouth piece having been placed within the lips of the patient, she was directed to breathe naturally, the nostrils being closed. During the inhalation, she coughed slightly once or twice, and required some persuasion to induce her to continue the process sufficiently long to produce the desired effects. After the lapse of six or eight minutes, she appeared to be in a state resembling that of intoxication; at this moment she was directed to open her mouth, and the teeth were rapidly extracted. The manifestations of apparent suffering, differed in no respect from what is usually seen during

similar operations, though on being interrogated when consciousness had partly returned, she acknowledged that she had felt little or no pain; that she knew nothing more of what had been done to her, after she was told to open her mouth.

On being questioned as to the state of her feelings, whilst under the influence of the vapour, whether they were pleasant or otherwise, she remarked that they were very unpleasant; this, the operator stated, was altogether different from what is usually experienced, the sensations being of the most delightful kind. When she arose to leave the theatre, she staggered like a person under the influence of liquor, and the assistance of two individuals was necessary to enable her to proceed.

The result of this trial, seems to confirm what has been stated in reference to the anodyne properties of this ætherial vapour, and that to a certain extent it renders the patient almost wholly insensible to pain. Though such be the fact, it cannot be denied that the employment of this *patented* nostrum by the profession—we mean those of it, who, by the position or rank they hold, are entitled to more than ordinary consideration and respect—is a wide departure from propriety, and the strict observance of the code of medical ethics. What now, we ask, is to prevent any member of the profession from using in his practice, any one, or all, if he pleases, of the patented medicines which he finds daily advertised and puffed in the newspapers, especially after the example set him by several of the surgeons of the two largest hospitals in the country? These gentlemen, have, we fear, incautiously ventured upon slippery ground, and it would be well for them to pause and reflect ere they proceed further."

[We have given place to the preceding statement, kindly furnished us by an eye witness, because we thought, that as public chroniclers of passing events, we were bound to furnish our readers with a notice of what was doing in a matter now exciting general interest. The results appear to be confirmatory of those obtained elsewhere by the use of the Letheon, although the gentleman under whose auspices they were undertaken, has been heard to express himself as by no means satisfied, that it would be found equal to what is anticipated by more sanguine experimenters. It is not our intention to make any comments, since no public testimony of approbation will probably follow. Moreover, the Letheon has as yet been confined to operations in dentistry. We do not object to dentists making use of this vapour, but referring to our preceding remarks upon the subject, we cannot but rejoice, that an accident has deprived us of the necessity of applying to a surgeon of the New-York Hospital, the remarks we felt bound to make on the conduct of those of a similar institution in a neighboring city. It is true that the fluid has since been used, in the case of a patient upon whom a camphor moxa was burned, and with its customary tranquillizing effect, and that this trenches a little more closely upon the domains of our own science. But even this is a small matter, and as we flatter ourselves that no further trials

will be made, so long as the secret is kept, we shall dismiss it *sub silentio*, and willingly leave the Letheon, so far as the New-York Hospital is concerned, to the operation of those Lethean waters which will soon, no doubt, flow into it, and which, mingling with it, as with those of a whilom celebrated watery predecessor, will speedily so dilute it, as to lessen at once its dangers and its supposed efficacy.

Meanwhile, as was to be expected, the novelty has been eagerly caught at, as novelties ever are, and sundry persons have been in haste to make hay while the sun shines. Everything now a-days, must be introduced to the public, as well as to the profession, and Dr. Kimball, the agent for the Letheon in this city, has edified the world in a long article in a city paper, upon its virtues. It appears from this, that two surgeons of this city, one of them placed upon the very highest pinnacle of surgical fame, have successfully used the Letheon in their private practice. We can only regret that these gentlemen did not take the same view of employing patented and secret nostra as ourselves, a view, which, it gratifies us much to find, meets with very general favour in the minds of the profession.

It is pleasing to the philanthropist, who must appreciate Dr. Kimball's disinterested zeal in the matter, to be told that Dr. K. is constantly employing it at his house, No. 522 Broadway, with the most *gratifying results*. But perhaps the most remarkable recent instance of the application of this celebrated sedative, is that in which it was administered to a patient, who underwent, under its influence, the removal of a cancerous mamma. The case will doubtless be submitted hereafter to the medical profession, through an appropriate medium; but the philanthropic haste of several editors of newspapers, who had been "invited" to be present, has forestalled the operator, Dr. C. T. Collins, of this city, and a circumstantial account has already appeared in several of the daily papers. The patient, we are told, was insensible to the whole operation, and with the editor of the *Sun*, we "congratulate the accomplished and humane Dr. Collins," on his success. These congratulations are mingled, however, with a dread, that among certain prejudiced persons in the profession, who cling with tenacity to obsolete and antiquated notions of propriety, there may be found some fault, that editors of daily secular papers should have been invited to witness a surgical operation, without being cautioned that they were not to suffer any account of it to appear in the prints under their control, a thing not only unusual, but liable to the suspicion of having been done for the sake of giving éclat to the operator, rather than to the Letheon; as tending slightly towards charlatanry; opposed to that nice sense of rectitude of conduct possessed by the persons aforesaid, and detracting in some degree from that sole regard to the interest of the patient, which it is thought by them should characterize the actions of every high-minded and honourable medical man. Such persons might be disposed (which we are not) to attribute to Dr. C. himself, some hand in this matter, and to opine that such conduct ill became one who had been himself a teacher of others, and the pages of whose journal

teem with well directed attacks against the quackeries of the day. Speaking of Homœopathy, (p. 363 of the *Reporter*,) Dr. Collins expresses his belief, that "it would have fallen to the ground long since, had it not been for those of the regular profession, who previously had little to do, and possessed but little, if any real honesty, and took up the practice because it was *something new*, and that money was the *ne plus ultra* of their ambition." Now, there may be, we repeat, persons in the profession, who might be disposed to connect remarks of this kind, with the case in question, and therefore, acquitting, as we do most cheerfully, Dr. Collins of all participation in this extra professional publicity, and attributing it wholly to the intemperate haste with which the editors of our smaller prints seek to communicate information to their readers, or to be more charitable, to the delight felt by them as philanthropists, in the pain-saving process which they had just witnessed, we feel some regret that they were not cautioned against making the publications which they have done. It is perhaps proper to say, that in the little heading to the note subsequently published by Dr. C., the editor of the *Sun* states, that he attended the operation, "at the invitation of a friend."

We had hoped in this number of the Annalist, to have noticed the papers of Drs. Warren and Bigelow, in the No. of the *Bost. Med. Journ.* for December 9th, but space fails us. In our next we will consider them, and with some general remarks on the subject of medical patents, take leave of the unpleasant topic altogether. The following paragraph we append by authority:]

The newspapers of the city have published accounts of some experiments in the New York Hospital, in the case of a new nostrum for rendering patients insensible during surgical operations. We learn that this experiment was made without any consultation of the Surgeons of the Hospital, or any previously expressed concurrence on their part.—*New York Annalist.*

Sickness at Algiers.—According to the Gazette Mèdicale, the hospitals of Algiers, are at present overcrowded with the sick. Numbers of patients labouring under fever are daily rejected from the civil hospital. Notwithstanding the exertions of the medical officers, numerous patients die without assistance.—*Med. Gaz.*

Gases in sea water—M. Lewy states that sea water holds only half as much gaseous matter as river water, and that the quantity varies according to the hours of the day. Thus he found in the waters of the ocean the following proportions:

	Morning.	Evening.
Carbonic acid, - -	3.4	2.9
Oxygen, - - -	5.4	.6
Nitrogen, - - -	11.	11.6
	19.8	20.5

Ib.

THE

MEDICAL EXAMINER

AND

RECORD OF MEDICAL SCIENCE.

NEW SERIES.—No. XXVI.—FEBRUARY, 1847.

ORIGINAL COMMUNICATIONS.

A singular case of complete closure of the Vagina, with subsequent conception, and safe delivery at the full period of utero-gestation. By Robert P. Simmons, M. D., St. Louis, Mo.

Some time towards the end of March, 1846, I was consulted by Mrs. E. B. W., a respectable married woman of this city, in reference to a mal-condition of the sexual organs, which she said rendered her unhappy in her domestic relations, and which she greatly desired to have remedied, should it be thought practicable. It not being convenient at the time to learn the history, or to enter upon an examination of the case, I promised to wait on her in a few days. Accordingly, on the second day of the following month, (April,) accompanied by my friend Dr. John Barnes, whom I invited to be present, I visited Mrs. W. for the purpose of making an examination of her condition. Before proceeding to do so, she detailed to us in substance the following history:

In the month of July, 1844, she was confined with her first and only child; had a laborious and very protracted labour, in which she suffered almost beyond endurance; the child was still born and unusually large; at the time of its birth she was exhausted and unconscious of what had happened. In a very few days after her accouchement, acute phlegmonous inflammation invaded the soft parts, terminating in sloughing, with excessive and long-

continued suppuration; and it was not till the middle of October following, that she could begin to date her recovery. Some time during the succeeding month (November) she became aware for the first time of her peculiar and unhappy condition—a complete closure of the vagina, which she observed "has continued unchanged to the present time."

Mrs. W. was attended in her accouchement by a medical gentleman of this city, who corroborates all she has said touching the severity of her labour, but, for some cause or other, he lost sight of the patient shortly afterwards, and can give no account of her subsequent and protracted illness.

Mrs. W. is a native of Ireland, aged 40 years, sanguineo-nervous temperament, possesses a good constitution, and never, as she informed us, failed to menstruate at her regular monthly periods, as well since as previous to her long confinement in 1844, except when she was pregnant, and at the period immediately preceding this examination, which she missed, and which ought to have been, as she said, about the middle of March, 1846.

Mrs. W. willingly submitted to an examination, with the hope that something could be done to remedy the defect. Accordingly she was placed on the bed, with the thighs elevated and the parts properly adjusted to the light. On proceeding to the examination, we could perceive nothing defective or unnatural in the labia externa, clitoris and fourchette, but on separating the labia to their fullest extent, we found the nymphæ almost entirely obliterated, and a dense fibrous structure presenting to our view, extending from the orifice of the urethra to the fourchette, and across from the base of one labium to that of the other, blocking up the mouth of the vagina completely, and resembling more than anything in appearance the palm of one's hand, when in an extended position. Dim tortuous lines of cicatrices were perceptible, and the whole surface of this structure presented to the touch a smooth, dense, elastic feel, but no opening or cavity whatever could be perceived. Impressed as we were, however, that an orifice or orifices did exist, from the circumstance of the menstrual discharge not being interrupted, we continued the examination for more than an hour with the greatest care and minuteness; used the smallest sized probes, applied them to every point of this structure and in every direction to its surface; also to the rugæ of mucous tissue lining the clitoris, fourchette and orifice of urethra, but we were unable to discover a single orifice or fissure communicating with the cavity of the vagina or uterus. The orifice of the urethra was of usual size, and occupied its natural situation—admitting the easy introduction of a medium sized catheter and its ready passage to the bladder. Our attention was then directed to the exploration of the urethral canal, believing

it possible that a fistulous orifice might be found near the opening of that tube, through which the menstrual fluid made its way from the uterus. Probes of various forms and sizes were used, but without obtaining the object of our pursuit; and ascertaining from the woman, that at no time during her menstrual flow did she perceive the discharges, either per urethram or per anum, even in the slightest degree tinctured with that fluid, we declined the further prosecution of our inquiry.

Unwilling at that time, to give a conclusive opinion with regard to the propriety of an operation for the restoration of the vaginal tube, I deferred doing so from time to time, until the latter part of July following, when the husband of this woman called to inform me that his wife began to suspect herself pregnant. I supposed at once that her fears arose from the suppression of menstruation, which I was aware had not appeared since the middle of February, this period being about six weeks previous to my first examination. I advised the man to go home and say to his wife that she was mistaken, assuring him at the same time that such an event was a total impossibility; and he, poor man, having too long had sufficient proofs of his wife's inaptitudes in this way, readily acquiesced with me in opinion. I called to see Mrs. W. on the 8th of August following; perceived that she had increased in size since I saw her last, and was about as large as one at the middle period of gestation. She repeated to me that she had not menstruated since the middle of February, and said that "she felt something move within her belly." The first time, as near as she could recollect, was about the middle of July.

Previously immersing my hand in cold water, I applied it to the abdomen, causing her suddenly to change her position from side to side, but I could perceive no motion. I then questioned her more critically than I had done, with regard to her sensations and aptitudes on the embrace of her husband. She declared to me her total incompetency to afford her husband any reciprocity in sexual intercourse, and also assured me that at no time since her misfortune in 1844, did she ever experience any other sensation than that of disrelish on his embrace. She further stated that she had a kind and effectionate husband, and it was on account of his privation alone, that she was induced to make her condition known to me. "If I am in the family way, it is as much a mystery to me as it is to you, Doctor, but from the way I feel, there *surely must be something living within me.*"

The case now became exceedingly interesting, and although I still doubted the possibility of pregnancy, I offered no further objections to her own diagnosis, based as it was on evidence so conclusive to her, and which, the issue of the case has proven,

was more certain than the lights by which I was governed in physiological science.

Mrs. W. requested me to keep her case in view, and if she were pregnant to attend her in her confinement; assuring me at the same time that she would look to no other source, except to her God, for help in her approaching tribulation! I continued to visit her occasionally, and as often found her increasing in size, and the abdomen presenting the feel and contour of one containing a growing fœtus in utero.

Fully satisfied as I was with regard to the actual condition of this woman, as herein stated, yet I felt solicitous for additional testimony, should she turn out to be pregnant, and with that view I obtained the consent of Mrs. W. to allow another professional friend, Dr. Cornelius Campbell, to make an examination of her case. He accordingly did so, with me, on the 3d day of September last. On this occasion we made the same close and minute examination that was done by Dr. Barnes and myself on the 2d of April,—used the smallest sized probes of every shape and form,—applied them in every direction and to every point of the fibrous structure blocking up the vagina; also between the folds of mucous tissue lining the labia pudendi, &c. &c., but we were equally unsuccessful as I had been before, for no passage or orifice whatever could be found communicating with the vagina.

The catheter was readily introduced into the bladder, as on a former occasion, but we could find no track from the urethra to the vagina or to any other cavity. Neither was there any malformation of the anus or fistulous orifices about its margin. This was the last ocular examination I had of the case; and I must here express my extreme regret that I was not permitted to have a cast or drawing taken of the parts, by which a clearer and more accurate idea could have been conveyed of the appearance and condition I have endeavoured to describe.

On the 20th of October last I was requested to visit Mrs. W. as a patient. She had been very ill the night previous, and complained of distressing pains in the back and loins, rendering her unable to be easy in any position more than fifteen minutes at a time. She was as large as one very near the full period of gestation, and by placing my hand on the abdomen I felt, for the first time, the motion of the fœtus. During the continuance of a pain I made an examination per os externum, and found the structure referred to presenting to the touch the same feel that it did on former examinations. There was no fulness or distension of the parts which the descent of a fœtus and collected waters within the membrane would indicate; I was, however, fully convinced that the poor woman was pregnant, and pre-

suming, on her own calculations, that she had not arrived at her full period of gestation, I took from the arm ʒxx. of blood, and gave Tinct. acetatis opii gutt. xxx. She was much relieved, and continued comparatively easy for several days, but the annoying pains returned, and continued with more or less severity up to the time of her accouchement.

On the 19th of November, at 6 o'clock, A. M., I was summoned to visit Mrs. W. in haste. On entering her apartment I found her in strong labour, and on making an examination per os externum, I discovered a fulness with great tension and pressing down of the smooth fibrous structure blocking up the vagina; and this condition of the parts increased on the return of every succeeding pain, till in the space of two hours I could perceive evident fluctuation of the waters within the membranes, and by forcible pressure with the fingers could feel a hard body low down in the pelvis, which I supposed was the head of the child.

Not feeling disposed to assume the entire responsibility of this extraordinary case, and besides desiring to afford the professional gentlemen who had previously examined the condition of this woman, Drs. Barnes and Campbell, an opportunity of witnessing the issue of the case, they were ordered to be sent for. In the mean time the parturient pains continuing with powerful force, the patient was placed on her back, with the thighs separated, and opening the labia-externa with the thumb and fingers of the left hand, I carefully divided the integuments with the scalpel to the extent of one inch, commencing the incision at the most prominent part of the tumour, and on a direct line from the orifice of the urethra to the perineum. The structure divided was about three-fourths of an inch in thickness, and of a firm fibrous texture, clearly indicating that the occlusion was not the result of simple adhesion of the sides of the vagina, but the new formation of tendinous tissue. Whether the membranes containing the liquor amnii had previously ruptured, or whether they were punctured with the point of the scalpel, it is impossible for me to know; at any rate, on passing through the structure with the knife, there was a free jet and flow of water for a moment, and also considerable hemorrhage, but this was not to an alarming extent, having its source principally in the great vascularity of the parts surrounding and closing the vagina.

I was now able to ascertain the condition of the os uteri—found it dilated to the size of a twenty-five cent piece, the margin thin and of a natural feel, with the head of the child presenting. By this time Dr. Campbell arrived, (Dr. Barnes not having received the notice,) when we dilated the incision previously made to the extent of two inches, by carefully dividing fibre by fibre,

with a well guarded probe-pointed bistoury, cutting both anteriorly and posteriorly. The pains continued with wonderful force, and the os uteri dilating, we soon were able to perceive the hairy scalp of the child, and ascertain more clearly its position, which was the posterior fontanelle to the symphysis pubis. The soft parts readily and safely dilated as the head advanced; and although the labour was both tedious and laborious, until the head emerged from the inferior strait of the pelvis, not an untoward event occurred, and the woman was safely delivered at five o'clock, P. M. same day, of a well formed and living female child, weighing 8 pounds. At this date (January 2d, 1847) both mother and child are living and doing well, and the poor woman feels doubly compensated for all her past afflictions, by the entire removal of her physical impotency, and the new source of moral happiness which has been lighted up on becoming a mother.

It may be proper to add, that great care was paid to the subsequent management of this case, and by means of a tent and other necessary applications, the newly formed vagina has been maintained. Suppuration has entirely ceased, and new mucous tissue partially formed on the internal sides of the divided structure.

The physiological questions involved in this case are—how did the menstrual fluid make its exit from the uterus, and by what law of the animal economy did conception take place? The woman's own statement, (her husband also concurring in the same facts) was, that since recovery from her long confinement in 1844, which was about the end of November of that year, her condition had been at no time different from what it was at my first and subsequent examinations; yet, notwithstanding, she menstruated regularly up to the middle of February, and at that time was as much unwell as usual.

She could give no account of it, except that the discharge issued from between the labia externa was small in quantity, continued about three days, and during these periods she never experienced any pain or difficulty whatever. Here I must express another regret—that in the investigation of this case, I never had an opportunity of observing the appearance of the parts during menstruation, which at the time I made my first examination it was my settled purpose to do at the next or some period of their flow, not having the most distant idea that pregnancy was the cause of their supppression.

Was there a vicarious secretion from the inner surface of the labia pudendi and contiguous parts, or did the menstrual fluid permeate through the fibrous structure blocking up the vagina?

I am inclined to adopt the latter opinion, although we were unable, on the minutest examination, to detect that condition of the surface which such a process would indicate.

In contemplating the curious phenomenon of conception in this case, I find on the very outset of the inquiry, the physiological views I had long entertained on the subject are subverted, and not feeling prepared to attempt an elucidation of that wonderful and mysterious function of organic life—conception—on any other principle than that of the actual presence of the semen masculinum within the cavity of the uterus, I will submit the rationale of this singular case to those who are deeper read in nature's laws, and whose province it is to demonstrate the occult mysteries in physiological science.

Saint Louis, Mo., January 2d, 1847.

Extraction of a large stone by the lateral operation. By R. Haywood, M. D. of Tuscaloosa, Alabama, (communicated in a letter to Professor Pancoast.)

Dear Sir:—I take pleasure in reporting to you another operation of Lithotomy which I have performed successfully. * * *

I was consulted by Mr. Armstead, of Tuscaloosa county, thirteen miles from this place, in a case of stone in his son, that had manifested unequivocal signs of its existence from birth. I sounded him and found a calculus of large size. I prepared him for an operation as soon as the condition of his case would permit, his health having suffered greatly from the presence of this foreign body in the bladder, until he was in his thirteenth year. As soon as the necessary preparation was made I performed the lateral operation, and extracted a stone weighing 1 oz. 5 dr. 16 grs.

I should have completed the whole operation in six minutes, had it not been that the shape of the stone was oblong, and I seized it first in its longitudinal diameter. I changed the forceps, and then seized it by its transverse diameter and extracted it.

In five weeks from the operation I sent the boy home, perfectly well. His health is now good, and he is daily improving in strength.

I send you enclosed an analysis of the stone and its weight, shape, size, appearance, &c., by Professor Brumby of the University of Alabama, (a gentleman highly distinguished in our state,) which you will be much gratified to examine.

University of Alabama, September 23d, 1846.

Dr. R. Haywood.

Dear Sir:—I have made a careful chemical examination of the calculus, which you gave me for the purpose on the 21st inst.

It was the largest I ever saw; weighed 653.70 grs., Troy, though three small fragments had been detached from it, while in your possession; was oblong-oval in form, slightly flattened; in colour yellowish-brown externally, white, with a tinge of yellow internally; its surface presented very distinct tubercles, and was coated with small, white, shining crystals. It was solid, compact, brittle, and easily cut or scraped with a knife; and when divided by a very fine saw, in the direction of the larger diagonal, its structure was beautifully displayed, showing a series of concentric coats, that diminished in hardness to the small, pulverulent, central nucleus.

Though only partially soluble in cold, it softened readily in hot water, and formed a white gelatinous mass, which subsided as the water cooled. In a solution, cold or hot, of pure potassa, it was insoluble; but it dissolved readily in dilute nitric, sulphuric, hydrochloric, and acetic acids. From these acid solutions, it was readily precipitated by excess of pure potassa or soda with the evolution of a urinous, ammoniacal odour. A few drops of ammoniacal nitrate of silver being added to a neutral solution of it in nitric acid, the peculiar colour of phosphate of silver instantly appeared. A fragment heated to redness in a small platinum crucible first turned black, then became white, and was neither consumed nor fused; and, even before the blowpipe, the white residue was fused without difficulty. I was unable, by the most careful experiments, to detect the presence of uric acid, in any sensible quantity.

You will perceive, from these results, that it must belong to the species denominated by chemists *ammoniaco-magnesian phosphate* or *triple calculus*. This species is rarely pure, but generally contains a mixture of phosphate of lime. I did not deem it necessary to investigate this point, as its determination would not have any influence on your treatment of your patient.

Yours most respectfully,

R. T. Brumby.

Report of Henry T. Child, M. D., *Vaccine Physician for the Northern District of the Northern Liberties of Philadelphia.*

To the Board of Commissioners of the Northern Liberties.

Gentlemen:—During the quarter ending on the first inst., I vaccinated eighty-one persons, twenty-nine of whom were males, and fifty two were females, which, together with four hundred and forty cases previously reported, makes a total of five hundred and twenty-one cases for the year 1846.

During the last three months I have found that a large number

of persons were insusceptible to the vaccine disease, when vaccinated under the most favourable circumstances, probably owing to the fact that we have no epidemic small pox influence in our midst.

In a former report, I remarked that previous to the existence of the epidemic, which was then prevailing, the failures among the first vaccinations were about ten per cent, but at that time they were not more than two per cent. After the disappearance of the epidemic the proportion of failures began to increase, and at present they are over thirty per cent, although the insertion of the virus, (known by its effect on others to be good,) has been repeated several times. I believe it is a fact that in those countries where small pox has never prevailed, vaccination can not be successfully performed, and I am inclined to the opinion that when there is no epidemic small pox existing, many persons will not receive the genuine vaccine disease; hence they will not be properly protected, and when exposed to the influence of small-pox, may be infected with varioloidor the disease in a modified form, and therefore I repeat my conviction as expressed in a former report, "that re-vaccination is necessary, during the existence of epidemic small pox, as a test of the protection of the system." All of which is respectfully submitted.

HENRY T. CHILD.

No. 132 Green street, N. L., 1st mo. 4th, 1847.

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Lectures introductory to courses on the various departments of medicine are often "abstracts and brief chronicles of the time." The professor does not feel himself necessarily restricted to the subject which he has to illustrate during the course. Common custom permits him to digress, and occasionally it happens, that he leaves the domain of medicine and wanders into other departments of science. We have heard of an introductory lecture to a course of Institutes of Medicine on 'Hunting,' which might, however, be regarded hygienically; and we have ourselves listened to a learned but somewhat imaginative discourse on the Natural History of the 'Seventeen year Locust'—*Cicada septendecim*—the prolegomenon to a course of lectures on the Theory and Practice of Medicine.

The lectures before us are somewhat discursive. A few are strictly introductory to the departments taught by their respective authors. Others touch more or less directly on the agitating question of *medical reform*—as it is commonly designated; and as few but reformers have much zeal in the cause, most of the writers are on that side of the question. Moral courage is demanded of any one who feels satisfied with the things 'that be,' and declares so openly; and it is too much the habit with the over-zealous—and therefore, too often intemperate, hasty, and injudicious—to consider those who do not belong to the move-

ment party 'arrogant,' as if the charge did not apply rather to active agitators, who are dissatisfied with arrangements over which they have no direct agency—although such agency would doubtless be most grateful to them.

It has been often said, that the present is eminently an age of improvement; and with this sentiment we fully accord. The profession, within the last few years, has advanced at a more rapid pace than probably at any former period of the same duration in medical history. We believe that there never were in the ranks of the profession so many who have had the benefit of medical instruction in the schools; and we doubt whether there was, at any time, so great a proportion of readers; and whether in all respects the profession was as respectable. Improvements may be, and are, suggested; some of them feasible; but most of them not; and it must ever be borne in mind, that modifications of educational systems which have been wisely suggested, and sustained by long experience, ought not to be made hastily; and that every great change is an experiment, which in a government—or system of twenty-nine governments—like ours, may not be found as satisfactory in practice as it seems to be sound in theory.

Let the youth intended for the medical profession have—as we remarked in our last number—the intellectual and moral training that befits the well educated gentleman;—let boards of examiners see that the candidate for practice has the necessary qualifications, and there can be no well founded cause of complaint on the score of insufficiency of attainments. The standard of qualification must ultimately be determined by such examining boards; and if they do their duty, the wildest reformer can see no necessity for periodical meetings of the profession with the expressed intention of pointing out, and attempting to rectify, defects, some of which are doubtless real; but even if real, their repeated promulgation is calculated to do more harm to the profession in its connexion with the people than all the vagaries of the empiric, and all the follies of homœopathy and mesmerism, against which certain journalists appear to direct their shafts, whilst they pass over in silence the employment of secret agents by members of our own profession, who, by publishing the results of their experience with such agents,

become the open abettors of quackery, and scarcely more elevated in the moral scale than the quacks themselves. Reform—it appears to us—is as imperiously demanded on the part of many of those already in the profession, as of such as are preparing to enter within its pales. We know it will be said, that the imperfectly educated, the low in the social scale, are more apt to embrace those very practices, and such may be the fact; still truth must compel us to admit, that examples are occasionally given by those who occupy high places, and whose conduct becomes the more injurious in consequence. Instances of this kind have been recently sufficiently and lamentably notorious, and may suggest interesting reflections to the members of the Convention who are about to congregate in this city.

But:—to the lectures before us:—

That of Dr. Dugas professes to be a sketch of the improvements in medicine during the present century. As in many similar productions, there is in it, we think, an overstrained eulogy of the medical profession. In the latter part of the following quotation, too, the exception appears to us to be brought forward as the rule; for so far as our own observation has extended, the mass of aspirants for medical honors have been impelled to enter the profession solely by their desire to obtain through it an honorable mode of subsistence.

"In Europe, where the Church, the Bar, the Army and the Navy are the high roads to political as well as to social preferment, we find the members of these professions almost exclusively derived from the wealthy and aristocratic classes of society. In our country, those who are ambitious of political station usually select the Bar. The medical profession is, on the contrary, made up of those whom neither wealth, nobility nor political ambition, prompts to seek any other than scientific distinction—that which can neither be bought with gold nor acquired by hereditary transmission, but which must flow from personal merit alone. It cannot be conceded that many enter this profession as a means of earning a livelihood; but it is an innate love of knowledge, a desire to look into the mysteries of nature, which prompts them, unconsciously perhaps, to select this in preference to other pursuits in which less scientific research is necessary." p. 6.

The progress of medical knowledge in all its departments, during the present century, is a field which might be tilled most productively; but the author before us has scarcely broken the surface; so that the announcement on the title-page is not satisfactorily fulfilled. Not much opportunity—it is true—is afforded for detail in a discourse of the kind, but many of the materials might, we think, have been better selected.

We do not know what amount of authority the lecturer has for the following broad assertion.

"Modern medicine has been peculiarly successful in facilitating the treatment of infantile diseases. At a time when the patient's testimony was the only source of information, a correct knowledge of the diseases of those deprived of language or of intelligence, as children and idiots, was unattainable; whereas, with the aid of physical signs and the *method of exclusion*, by which all organs ascertained to be in a healthy state are excluded from farther observation, there are few, very few, cases in which any difficulty will be experienced in the formation of a correct diagnosis." p. 14.

Or for the following.

"There is no disease in which the usefulness of our profession is more signally illustrated than that commonly called bilious fever, for whilst, if left to the unaided efforts of nature it will almost invariably terminate fatally, it now rarely if ever does so under early and skilful medication." p. 15.

Or for the following.

"The Medical College of Georgia may justly claim the merit of having been the first to promulgate the great reformation in the treatment of paroxysmal fevers." p. 16.

The lecture "on practical education in medicine" by Dr. Watson naturally dwells, but in no measured terms of eulogy, on the New York Hospital, which, if we were to judge from the Announcements and other advertisements of the Medical Department of the University of New York, affords to the student of medicine facilities not enjoyed elsewhere, and of which we would infer from the same sources he is not slow to avail himself. Under this impression, indeed, students have been induced—we had almost said *enticed*—to visit New York, when they have been surprised to find scarcely any in attendance. So late, indeed, as the winter of 1845–6—according to the New

York Journal of Medicine—not more than twenty of the students actually took the Hospital ticket ; and in the lecture before us Dr. Watson grievously deplores their scanty attendance.

"There were probably," he says, "between six and seven hundred medical students in this city (New York) during the last winter. I was on duty in the second surgical department of this hospital during the greater part of that time, and strange to say, *it was a rare thing to see the face of a single student in any of my wards during the whole of my attendance.*"

With what propriety, then, can the array of cases of sickness treated in that institution be adduced by any Medical College as an incentive to the medical student for preferring New York to Philadelphia, when in the latter city there are not only opportunities for clinical instruction, but these opportunities are actually embraced by numerous students. During the last official year—we speak from authority—not fewer than *one hundred and forty-six* students took the ticket at the Pennsylvania Hospital; and from Jan. 1846 to Jan. 1847—the University of Pennsylvania requiring their candidates for graduation to have attended one course of hospital instruction—not fewer than *two hundred and eighty-three.*

Dr. Watson properly urges the importance of clinical instruction, and who denies it? But it is an interesting question, whether it be to the welfare of the patient or to the advantage of the student that *masses* shall congregate daily in the wards, disturb the febrile and inflammatory, and examine individually, and in succession, the physical signs in thoracic and other diseases. There can be, from the philanthropist but one answer we apprehend to the question ; and hence the clinical teacher is compelled to select cases—as was long the custom at the Philadelphia Hospital and is still at the College clinics—for illustration in the amphitheatre,—the student having, at the same time, ample opportunity for witnessing the surgical and general management of the hospital.

So far, then, as facilities are afforded and embraced, there would seem to be no comparison between the advantages actually derived from clinical attendance by the students of Philadelphia and of New York.

The author of the lecture gives a brief history of clinical instruction in this country and elsewhere, into which we cannot

follow him. We have only space for one or two comments and rectifications. He is not quite as cosmopolitan as we could desire. Not only the hospital to which he is attached, but other institutions in the city of his residence, occupy, we think, too high a place in his thoughts. For example, he says:

"The cause of education in our well-appointed colleges—and *especially in the rival schools of this city*, (rivals be it ever hoped only in their ability for usefulness,) is every year becoming more and more elevated."

Quod est demonstrandum. We pause at least for the evidence.

Dr. Watson is a reformer—doubtless the advocate of a judicious reform—as we were wont to hear of the advocates of a judicious tariff. The following sentiment appertains to many as well as to himself.

"Gentlemen, the medical institution which first comes up to the reasonable demands of the profession in this respect, and, possessing the facilities, requires of its graduates practical acquirements equal to those at present enjoined upon the students of European schools, will find its interest in the measure." p. 8.

We do not believe in this. Such an institution may be able to exclaim with Francis the first, "*tout est perdu sauf notre honneur*," or it may have to submit to its benches being filled by a "select few." We have now in mind a distinguished literary institution, in which it was determined to "raise the standard," and to render its highest honours difficult of attainment. This was done; and whilst the graduates of other institutions were annually numerous, this distinguished school did not confer its highest degree at any time on more than half a dozen; and in some years, we believe, not a single candidate presented himself. It may be said, that they who succeeded would be more respected and successful than the alumni of other institutions where graduation was more easy; but we have had no evidence of this; on the contrary we do not know a single case in which marked advantage has accrued to the graduate for the toil which he had to undergo for this more elevated collegiate distinction. Let a department of higher mathematics be established in our colleges, and even if filled by a La Place or a Gauss, it might be attended by a few pupils; whilst the benches appropriated to lower mathematics under an ordinary teacher would

be filled to overflowing. A certain, or rather uncertain, amount of knowledge is admitted by all to be requisite; but the general feeling — erroneous we grant it to be — is that high literary and scientific distinction is not necessary, and may be injurious in the transaction of the business concerns of life; hence we not unfrequently see the learned and accomplished physician dismissed, and the lowest empiric consulted in his place. It is strange, but not less true, that an individual ordinarily—and even more than ordinarily—intelligent will consent to confide in the professional judgment of one whose opinions on any other matter he would contemn.

On the subject of "College Clinics," Dr. Watson dwells at some length, properly urging, that "to dispensary service, when confined to the management of such affections as legitimately belong to it, there is no direct objection;" but college dispensaries should never be held up as sufficient to supply the place of hospitals.

The college *cliniques*, he remarks, were first started in a neighbouring city, "where hospital privileges had been so much restricted as to be of little service to the winter students." In this he is altogether misinformed,—if he applies the remark to Philadelphia.

"As an expedient for supplying this deficiency, they were unquestionably acceptable on the same principle that half a loaf is better than no bread. They were at first called by their true name; but this attracting ltitle notice was soon altered. The example thus set, and the title thus assumed, were copied by the schools of other places."

Dr. Watson does not here do justice to the city of his choice. We believe, that much of the credit that attaches to the college clinics belongs to it, and that the very name was applied to the "clinical" service at the University of New York before it was adopted here.

"The *clinique epidemic* of the colleges, as my friend Dr. Bell has happily expressed it," [we do not see wherein the happiness lies,] "was last winter at its height. The students, one and all, were affected by it, and the hospitals were forsaken."

Certainly not in Philadelphia. The observation may and doubtless does apply to New York, but not to this city.

The lecturer adds—

"It is to be presumed, ere this, the disease has materially

abated. Such I am told, is the fact in Philadelphia, where it first broke out. The University of Pennsylvania, and some of the other schools there have already abandoned their dispensaries, and are now supplying their second course students with hospital tickets at their own expense."

Some one has evidently been gulling the worthy author. There is not a word of real history in this quotation. There has been no abandonment of their clinics by other schools, and consequent supplying of tickets to the hospitals gratuitously. The clinic of the Jefferson Medical College was never in so flourishing a state, and so extensively useful. One other clinic has been added to the list—that of the Franklin College. The Pennsylvania College has never had a regular clinic, and gives—as it did last year—to second class students tickets to the Pennsylvania Hospital; but no such thing has been done by the University of Pennsylvania, which—if it has abandoned the *name* of college clinics, professes to teach—*mutato nomine*—"*demonstrative medicine*" on one day of the week, and "*demonstrative surgery*" on another! It would be difficult to find any where a sentence in which so much error—doubtless unintentional—is contained in so small a compass.

Our opinion of hospital attendance for *masses* has already been expressed, and as *masses* must be supplied in the best mode that is practicable, we do not hesitate to affirm, as our conviction, that the introduction of "College Clinics"—we use the term generally appropriated to them, and see no valid objection to it—is the most important single addition to medical educational resources that has been proposed in recent periods.

"Gentlemen," says Dr. Watson, "if I know my own mind, I have no disposition to draw invidious comparisons, or to speak of the relative advantages of rival cities or of rival institutions." p. 12.

Why then does he exclaim, after having made the erroneous statements referred to above:—"and if hospital attendance there [meaning in Philadelphia,] is beyond measure superior to their misnamed cliniques, [he had before shown that both were desirable, and had not instituted an "invidious comparison,"] what are we to think of the facilities for practical instruction enjoyed by students within the walls of the New York Hospital?"

We do not see the *sequitur*. If the hospital attendance in Philadelphia be better than the college clinics, what are the facilities for practical instruction enjoyed by students within the walls of the New York Hospital? Such appears to be the proposition, which we are not Cocker enough to solve.

We have no doubt of the value of the New York Hospital, and of the entire honesty of purpose of the author of the lecture before us; yet it must be admitted by the best friends of the Institution, that the picture of it given by him *savours* of hyperbole.

"You may," he observes, "in other countries find larger hospitals, but none presenting a greater variety of acute and important diseases; you may find in other hospitals abler teachers, but none so [?] willing as we have been to give you our time and services for nothing. You may find in some few other institutions greater opportunities for autopsic [a vile word] examinations; you may find in the cabinets of foreign societies, more valuable pathological collections; you may, in other cities, even find larger libraries than ours; but look for all these together in any other hospital either at home or abroad, and you will look for them in vain [?] *I say it without fear of contradiction, you will not find a single hospital to compare with this,—not one that contains within itself so many advantages for both theoretical and practical study as the New York Hospital.*" p. 19. Shame, then, on the profession of New York!—Shame, on the Professors of the two "rival schools," the course of education in which "is becoming every year more and more elevated!" Shame on the six or seven hundred medical students in the city during the last winter—that in the second surgical department, during the greater part of the winter, "it was a rare thing to see the face of a single student."

The peroration of the lecturer is judicious and wholly unobjectionable. It is well worthy of being retained in the recollection of the clinical student.

"During the coming winter, it will be well for every medical student here, but more particularly for such as are not prepared to remain in town after the close of the college session, to visit the hospital daily. Let nothing prevent you from attending at the hour set apart for the purpose.

Come not merely with your ears open, as students often do.

Come not to gaze about the wards with idle curiosity. But rather, come like philosophers, with all your faculties awake, for examining, comparing, judging, and thinking for yourselves; and working, too, for yourselves, at every opportunity.

Pick out your own cases, and study these, and note these for yourselves. Do not attempt to listen to all that is said with the view of remembering it:—but listen well to what is said of the cases on your own list, and see if it be true. Attempt not too much.

Do not fall into the peurile fondness of hunting after strange sights, rare diseases, and great cases. The dressing of an ulcer, the setting of a bone, the treatment of a pleurisy, pneumonia, or fever,—these, and such as these, should be your study here. Striking cases you may look at; but the business that should fix your attention, is that which best prepares you for the daily business of the profession.

Finally, avoid that morbid appetite for surgical operations, so long magnified and so much over-rated. Surgery is a good thing, a useful, an excellent thing in its way; but too much of it is a great evil. And the sooner you find out this for yourselves, the better for your patients. p. 19.

Dr. Bullitt's lecture is his maiden effort at the Saint Louis University. It contains much that is interesting and generally well expressed. "My primary allegiance," he remarks, "is to the general cause of medical science, and then to the cause of the medical department of the Saint Louis University;" and he expresses to his class a hope, that he may be able so to discharge the duties of teacher in the institution, as to make his "labours tributary to the common good of our common calling." Such we have little doubt will be the case.

We had marked one or two passages for extract and comment, but we cannot find space for them. This same circumstance will prevent us from giving more than a passing notice of the other introductories before us.

The lecture of Dr. Harrison inquires into the obligations of the medical profession to society, and the obligations of the public to the medical profession; and is an interesting discourse.

That of Dr. Patterson indicates a cultivated intellect. The style is vigorous, tinctured somewhat with the German, and perhaps with Carlylism, which we abhor; but it is never mystical, and always sententious.

The lectures of Dr. Huston and Dr. Meigs were delivered before the class of Jefferson Medical College—the largest, we may add, that has ever attended medical lectures in this country; and therefore sufficient to inspire the learned professors with unwonted energy. Dr. Huston's discourse is a scorching and able disclosure of Hahnemannism, clearly expressed—and it ought to convince all, who are susceptible of conviction, that the whole infinitesimal system is founded on folly, and too often practised in imposture.

The discourse of Dr. Meigs is full of the fire and enthusiasm which have ever characterized him. "I acknowledge" he says, "that I am an enthusiastic admirer of my profession. My speech shows it, and my whole past life is a perpetual proof of it. But I love that profession as a ministry, not as a trade."

The following observations on what has been sarcastically termed "book learning," or "book knowledge," from one who is so eminent in the practical exercise of his calling, are a satisfactory answer to those ignoramuses who pretend to despise books.

"Gentlemen, no man can study medicine by himself. He must have help and that help comes from books. I never could have learned why I ought to do thus and so, to keep a lady patient from bleeding to death, or from perishing with convulsions, out of my own primary independent observation and reflection. If I have done so, I thank the fathers, as I thank every good man—whether Greek or Roman, Arabian or European—who in ages past has put upon record the things that have been observed in medicine, and if I know those things I owe that knowledge to them; I could never have learned it of myself. Therefore, I love books. I think there is no good physician without their aid—nor can be none. Instead of disparaging books and authors, I would rather glorify and honour them when meritorious." p. 8.

The lectures of Professors Bedford and Gilbert are strictly introductory to their courses. We would remind the former, who says, that "Doctor Robert Lee, of London, has recently made some valuable contributions on the subject of the nerves of the uterus,"—that the nerves depicted by Dr. Lee have, by a still more recent observer—Mr. Beck—whose memoir has received

a medal from the Royal Society of London—been affirmed to be no nerves at all.

From a remark by Dr. Gilbert, Dr. Watson will find, that the Professor of Surgery in the Pennsylvania Medical College has no objection to surgical cases being brought before a class, which is all that is done in the regular "school clinics."

"Without pretending for a moment," he says, "to present, in addition to the regular course, an *adequate surgical clinic*, whenever the character of the case, however, and other circumstances are such as to render it compatible with the feelings and general advantage of the patient, I will present to the class as much practical surgery as can, with propriety, be brought before them. The experience of the two last sessions warrants me in saying to you, that cases of this kind may be expected; which, with the ample surgical and medical clinics of that time-honored institution, the *Pennsylvania Hospital*, will afford you clinical facilities *equal and we believe superior to those of any school in the country*." [!!]

Lastly. It is not many years since the excellent institution—the Baltimore College of Dental Surgery—which has done, and is still doing, so much to elevate the professional character of the dentist—was chartered by the State of Maryland; and already many interesting and useful productions have emanated from it. The lecture of Dr. Westcott may be esteemed one of these. It canvasses whether "dental colleges possess peculiar advantages over any other means of securing a dental education"—determining the question—as might be expected—in the affirmative, and we are not disposed to cavil at the decision.

We are pleased, to observe, that extensive, general, and professional attainments are urged as indispensable to make up the character of an accomplished dentist. Whilst manual dexterity is important, it is wisely maintained, that the operator should be a well-educated gentleman, and that a knowledge of every branch of medical science should enter into the list of his evidences of fitness to do credit to himself, to the avocation which he has embraced, and to the community.

A Practical Treatise on Inflammation, Ulceration, and Induration of the Neck of the Uterus: with remarks on the value of Leucorrhœa and Prolapsus Uteri as symptoms of Uterine Disease. By JAMES HENRY BENNET, M. D., etc. etc, 12mo. pp. 146. Lea & Blanchard. Philadelphia, 1847.

The basis of the present work was submitted by the author, a few years since, to the Faculty of Medicine of Paris as a thesis, on his graduating in that University. Subsequently, more elaborated, the essay was published, in parts, in the London Lancet; and afterwards in a yet more extended form, as a separate publication, of which the present is a reprint.

From the brief autobiography given in the Preface, we learn that the author spent seven years in the Saint Louis, La Pitié, and Salpetrière Hospitals of Paris, first as pupil, and then as "interne" or resident physician.

"Under such circumstances," says the author, "I cannot, certainly, be reproached with not having matured my opinions. In the first instance, they were formed after I had long enjoyed very great opportunities of seeing uterine disease. They have since been considered over and over again, and have stood the test of several years additional experience."

"Some of the views which I bring forward will, I believe, be found original,—at least, if I can trust the results of my bibliographical researches. I have also many details of great interest and importance to present, with reference to the various modes of *treatment* in inflammation, ulceration, and induration of the uterine neck adopted by the Paris physicians and surgeons—details which will, I believe, be new to most of my readers. Having carefully watched, during a great length of time, the effects of the treatment followed by the eminent Parisian practitioners, with whom the knowledge of this form of disease recently originated, and that under the most favourable circumstances—as their pupil or assistant—I have been able, I hope, to form a correct estimate of the comparative value of the different agents they employ. I have thus, I am also inclined to think, learnt how to avoid the exclusiveness which most of them show in the choice of their therapeutic agents."

One can scarcely repress a smile at the confidence with which many of the young members of our profession express their opinions, after a residence of a few years, or as it some-

times happens, of a few months, in Paris, and of which the preceding extract is no very bad example. The natural enthusiasm of youth, operated upon by the example and habits common, to a great extent, in the French metropolis, are perhaps a sufficient apology for this self-complacency, until time chastens the one, and better example corrects the other.

We have looked through Dr. Bennet's *brochure* with some interest to find the "original" views which he deems so important without discovering them, although we have found much in it to approve, and we are inclined to think that his "bibliographical researches" have not been remarkably extensive, even among Parisian authors, to say nothing of British and German.

The subjects embraced in this treatise are of great importance, and we regret to say, generally too little understood by those entrusted with the treatment of such complaints; this, rather than any novelties contained in the book, or that we have to offer, claims from us more than a passing notice.

The author asserts that inflammation of the neck of the uterus, with its sequelæ, ulceration and induration, "is an exceedingly common affection"—and "is the principal cause, also, of several morbid states which are generally, if not always, studied independently of any such origin; as, for instance, prolapsus of the uterus and leucorrhœa."

That inflammation of the neck "is the principal cause" of prolapse of the uterus, is not very clear to our mind, but that it is often mistaken and treated for the latter affection, we know from abundant experience—no mistake indeed is more common.

"With reference to leucorrhœa," says the author, "indeed, I have ascertained, to my complete satisfaction—firstly, that, setting aside cancerous disease, in the very great majority of adult females who have been exposed to sexual intercourse, a confirmed leucorrhœal discharge, whatever may be its nature, is accompanied by inflammation of the neck of the uterus; secondly, that this inflammation seldom exists long without producing ulceration; and, thirdly, that ulceration is *always* accompanied by more or less engorgement (swelling, with or without induration) of the substance of the uterine neck."

We have no doubt of the correctness of these propositions; they are true as far as they go; but they do not go far enough,

as it regards leucorrhœa. That inflammation of the vagina, and often of the neck of the uterus, precedes leucorrhœa, no one will deny; and we are prepared to admit with Dr. Bennet that, after no long time, ulcerations of the cervix uteri frequently occur; but this does not account for *uterine leucorrhœa*,—in which the discharge comes from the *cavity* of the uterus.

The author makes what he considers "a fundamental and most important distinction between inflammations and ulcerations which occur in the uterine neck of females who *have never conceived*, and those which take place in the same region in females who *have conceived*—that is, who have either miscarried or borne children." In the consideration of these diseases, he carries this division throughout the book; and in doing so, we cannot doubt that he magnifies unduly the influence of conception on the permanent condition of the parts. Those who bear children, and especially those who suffer frequent miscarriages, are undoubtedly most prone to inflammation and its consequences in the sexual organs, if we except prostitutes, with whom such complaints are almost universal, whether they have conceived or not. It is rare to meet with a woman has been long "on the town" who has not more or less disease of the neck of the uterus, although she may never have suffered from any of the forms of syphilis; nor is it rare to find individuals who have conceived, and even borne one or more children, in whom the condition of the neck of the uterus has returned in its physical condition very nearly to the virgin state—to a condition in no respect less healthy than before conception.

The following fact noticed by the author is one of great importance in practice, and often not appreciated by the practitioner.

"The size and length of the cervix uteri vary considerably in different females—a fact which must necessarily be taken into consideration if we wish to appreciate the existence or non-existence of engorgement, or morbid increased volume, of the organ. Indeed, these physiological (anatomical) variations are so great, that were we to allow ourselves to be guided by size alone, as appreciated by the toucher or speculum, we should, undoubtedly be often misled, and induced to suppose that disease existed when it did not. In reality, a very voluminous healthy cervix uteri is perfectly compatible with entire freedom, even from un-

easy sensation. The difference in length of that part of the cervix uteri which projects into the vaginal cavity, is evidently owing principally, to the vagina being implanted, as it were, at different heights on the cervix, so that in some females it is merely a few lines in length, whereas in others it is an inch and a half, or more. This physiological elongation of the cervix uteri may, it appears, be carried to such an extent, that its free extremity reaches the orifice of the vulva. Dr. Henning, in his essays on uterine diseases, lately published in 'The Lancet,' mentions several curious cases of the kind."

The following observations on the subject of hypertrophy of the cervix accords so fully with our own experience, that we cannot refrain from calling the attention of the profession to their importance.

"If the hypertrophy is considerable and general, the prolapsus of the cervix is constant, the irritation great; and ulceration and abundant leucorrhœa are nearly always present. If inconsiderable, or limited to one region of the cervix, the surface of the organ may be free from the disease, and the uterus may prolapse only after long standing, or walking or great fatigue of any kind. These are by no means uncommon states. Indeed, I have no hesitation in saying, that a very large proportion of the cases, both of slight and of severe uterine prolapsus, which are met with in practice, and for which pessaries are so improperly used, are the result of chronic hypertrophy of the uterine cervix."

We would even go further than the author, and say that a large number of the cases treated as prolapsus are either simple inflammation of the cervix or engorgement of the uterus, which result in ulceration or hypertrophy from neglect, and too often from the irritation produced by the improper use of pessaries and other means for the cure of simple prolapse proceeding from relaxation of the uterine supports.

The author witnessed the treatment of a great many cases of cancer of the uterus in the Parisian hospitals, and the following is the result of his observations.

"I have hitherto always found cancers of the cervix uteri, whether ulcerated or not, incurable; like cancer in other parts of the economy. In other words, I have never seen an evidently cancerous tumour or ulceration of the cervix, respecting the existence and identity of which there was not a shadow of doubt,

cured—that is, dissolved, removed, either by local applications or by general treatment."

Of "localized cancer of the cervix," treated by amputation, he witnessed no better results. "The cases in which it (amputation) has been performed successfully, are generally considered to have been merely cases of inflammatory induration of the cervix," in which he thinks deep cauterization is a much safer remedy.

The Dog. By WILLIAM YOUATT, Edited, with additions, by E. J. LEWIS, M. D. Member of the Academy of Natural Sciences of Philadelphia; of the Philadelphia Medical Society; of the Parisian Medical Society, etc. 8 vo. pp. 403. Lea & Blanchard, Philadelphia, 1847.

To the lovers of the dog, (and who does not love that brave and devoted animal?) this is a most acceptable volume. Not only to the sportsman and the naturalist, but to the physician, and the housekeeper of every grade, the history of this faithful and sagacious animal,—his diseases and his habits,—is full of interest. "The dog, next to the human being, ranks highest in the scale of intelligence, and was evidently designed to be the companion and the friend of man." "Man," says Burns, "is the God of the dog; he knows no other; and see how he worships him. With what reverence he crouches at his feet—with what reverence he looks up to him—with what delight he fawns upon him, and with what cheerful alacrity he obeys him!" An animal that guards us while we sleep, enjoys our pastimes, and watches with almost parental care the tottering footsteps of our children, has strong claims on our benevolence, and it is the duty of those who exact his services to minister to his wants not less in sickness than in health. To do this effectually, they must study his constitution, his habits, his diseases and their remedies. To all such we commend Mr. Youatt's book. The medical reader will be surprised to learn from its pages "how many ills that animal shares in common with the human race;" whilst the general reader will find its pages rich with anecdotes and varied information. No inconsiderable part of this has been supplied by the

editor, who has, indeed, performed his part with much care and ability.

The work is beautifully got up by the Philadelphia publishers —paper, typography, binding—every thing is in keeping. The engravings representing the varieties of the dog are by Gilbert & Gihon, and are well executed.

A System of Human Anatomy, General and Special. By Erasmus Wilson, M. D. Lecturer on Anatomy, London. Third American, from the third London edition. Edited by Paul B. Goddard, A. M., M. D. Professor of Anatomy in the Franklin College of Philadelphia. With two hundred and thirty-three illustrations by Gilbert. 8vo. pp. 610. Lea & Blanchard: Philadelphia, 1847.

Since the publication of the former American edition, a third edition has been issued by the author in London, containing some additions and improvements. The present edition, we are assured by the editor, "is a careful and exact reprint of the English work, with the addition of such other illustrations as were deemed necessary to a more complete elucidation of the text." Thus it will be seen that the value of the present edition is materially enhanced over that of its predecessors, and in its present improved form offers to the student all the assistance that can reasonably be expected from such a work.

Second Annual Announcement of the Medical Institute of Cincinnati, Session of 1847.

The lecturers of this Association are Drs. Judkins, Woodward, Warder, Kendrick, Vattier, Mendenhall, Raymond, and Stuart; several of whom are advantageously known as contributors to the Medical Journals, and all, we have no doubt, well qualified for the duties they have assumed. The lectures are to commence on the first Monday in March, and continue four months, embracing all the subjects usually taught in summer schools.

We are glad to see our younger brethren in "the Queen City of the West," exerting themselves in increasing the facilities for

gaining instruction in their beautiful town. We have ever regarded such enterprises favourably, and can see no reason why the attempt should not succeed in a city of so large a population as Cincinnati, when made in the right spirit and sustained with becoming energy. From the impossibility of carrying on dissections, and of giving demonstrations in anatomy on the recent subject, during warm weather, a full and complete course on all the branches of medical education, such as is necessary to qualify a young man for graduation, cannot be expected, even if it were possible, which no one will pretend, for the student to undergo the fatigue, in hot weather, of following the requisite number of lectures each day to complete the whole in four or even six months but attendance on one or two lectures a day will hardly be too great a tax upon his health, while it will materially assist his comprehension of what he reads; and when the subjects taught are collateral, and not mere repetitions of the winter lectures, great advantage must accrue to the industrious learner.

RECORD OF MEDICAL SCIENCE.

Remarks on the use of Quinine in Intermittent and Remittent Fevers. By L. A. Dugas, M. D., Professor in the Medical College of Georgia.—Having received during the past season a number of communications requesting my views on the use of quinine in the treatment of our autumnal fevers, I beg leave to reply to them through the medium of this Journal.

The fevers of this section of our country being almost exclusively paroxysmal, it may be well to premise, very briefly, my views of their pathology, by which it will be perceived that I regard them as essentially different from those *continued* fevers more commonly encountered in colder latitudes, and which have been denominated Typhoid, Typhus, Follicular enteritis, Dothenenteritis, Jail fever, Ship fever, &c.

Our paroxysmal fevers are either intermittent or remittent at their onset; but, if not arrested, the former may, more or less early, become remittent, or the remittent assume the intermittent type; thus showing them to be only different degrees of the same disease. They both present the same paroxysmal phenomena, that is to say,

have regular periods of recurrence or exacerbation, and of declension; they are both preceded and accompanied by a general disturbance, more or less marked, of all the functions of the system, but more especially of those usually termed nervous, as those of sensibility and muscular motion. Lassitude, pains in the limbs, back and head, loss of muscular strength, are premonitory and persistent in both. The activity of the circulation, however great, is not continuous as in the phlegmasiæ, but partakes of the same paroxysmal character as the other phenomena. Indeed it may be established as a maxim, that no inflammatory disease even assumes the paroxysmal character, inasmuch as all inflammations pursue an uninterrupted course, whether they terminate in resolution, suppuration or gangrene. Wherever inflammation is exposed to ocular observation, it is never seen suddenly to disappear and to return at stated intervals, or otherwise; but it runs a uniform course which cannot be suddenly modified by the efforts of nature nor by any agent with which we are acquainted. Pure inflammation of internal parts, as pneumonia, pleurisy. acute articular rheumatism, enteritis, &c., observes the same course; there is nothing paroxysmal in these diseases; the febrile action is not attended with daily or periodical exacerbations, but gradually progresses to a certain point, and then gradually declines with the subsidence of the inflammation. Periodicity or the paroxysmal peculiarity is characteristic of the neuroses properly so called, of diseases of the nervous system, which modify the functions of remote organs, and which may be dependent upon congestion, but certainly never upon inflammation. We know of no organ, whose inflammation could furnish us any rational explanation of the varied phenomena of intermittent or of remittent fever. Let us however look to the nervous system for the solution of the problem of these fevers, and all becomes perfectly plain. The languor, lassitude, general and local pains, tremor, modifications of the capillary as well as of the general circulation and of the secretions, and, above all, the abrupt transitions from a normal state to one of great perturbation, and from this again to comparative health, together with the periodical returns of the morbid manifestations—all indicate manifestly great disturbance of that pervading system whose condition is reflected in every part of the body—the nervous system. There is no other system whose impairment could by any possibility yield us the phenomena above related; still less is there any single organ that could by any modification of its condition, produce such general perturbation of the acts of the economy. Intermittents and remittents then are unquestionably the manifestations of deranged innervation; and if arrested sufficiently early will be attended with but little injury to any organ. A continuance of frequent repetition of this derangement, however, may more or less seriously implicate the parenchymatous and secerning structures, inducing inflammatory action, and may even terminate in fatal congestions.

With these views of the pathology of paroxysmal fevers, we are led naturally to the use of such remedies as are calculated to arrest

or to modify the perversion of innervation. Theory alone would indicate a resort to any agent known to blunt the nervous sensibilities, and thus to diminish their mobility or tendency to perturbation. Narcotics would present themselves in the first line. Every one knows that opium, morphine, camphor, alcoholic liquors, sulphuric ether, &c., are valuable remedies in intermittent fevers. Indeed a favorite prescription with me in such cases is a combination of 2 parts of sulphuric ether, 1 part of tincture of camphor and 1 part of tincture of opium, of which I give a tea-spoonful in a wine-glass of cold water two hours before the expected paroxysm, and half this quantity again at the expected hour of attack; the patient remaining in bed during the effect of the remedy. This rarely fails in uncomplicated cases of intermittent fever; if it does not completely succeed the first day, it will the next. I have frequently averted, or favorably modified even a paroxysm of *remittent* fever by the administration of a full dose of morphine ($\frac{1}{4}$ to $\frac{1}{2}$ gr.) half an hour before the expected exacerbation. But the efficacy of narcotics is not so fully borne out by experience as is that of quinine, an agent which as yet holds a position unique in the materia medica. The most striking peculiarity of quinine is its power to prevent the return of periodical affections, and this appears to me to be effected by blunting the susceptibilities of the nervous system. The senses whose acuteness of perception we can most easily observe, are manifestly blunted. Audition is very soon impaired, and so is vision, if the dose of the remedy be large. The effect of quinine on the heart, in our fevers at least, is unquestionably to diminish the force and frequency of its action, and if the quantity administered be large, a general relaxation, attended with a profuse cold sweat, will be produced, resembling and therefore mistaken by the inexperienced for a collapse of fatal tendency. Having tried it in cases of pure phlegmasia, in pneumonia and acute articular rheumatism, for example, without any aggravation of the febrile action, I cannot regard it as a stimulant.

There is, I believe, no difference of opinion in relation to the value of quinine in the treatment of intermittent fevers. I will, therefore, now confine my remarks to Remittent fevers, comprehending under this term, bilious, malignant, congestive, and country fevers. These are usually preceded by premonitions, which if properly attended to, would enable us to avert their developement with great ease. It is, however, exceedingly rare that medical aid is invoked thus early, and the physician is generally called in only during the first or second strong paroxysm; often much later. The paroxysm, when once fully developed, will usually run its course despite of any efforts we may use to check it. I therefore generally direct merely a foot-bath, and the free use of cold drinks, as water, lemonade, or soda water, until the period of remission. Should there be, however, such a determination to some vital organ as to threaten serious injury before the equilibrium of the circulation be restored by the subsidence of the exacerbation, I abstract blood with cups to the spine, sometimes (though rarely) deplete from the arm, and urge the use of revulsives,

as hot and stimulating pediluvia, and sinapisms to the spine, epigastrium, feet, &c.; if the head be congested, the affusion of cold water to it, continued until the pulse be depressed, and repeated as this reacts, is the most efficacious application I know of. Saline enemata, especially if the bowels are full, should not be omitted, as cathartics will very rarely act during the stage of excitement. If the congestion be attended with cold clammy skin, a small and feeble pulse, and prostration of the vital energies, I advise, in addition to the revulsives, large and repeated doses of the above-mentioned combination of ether, laudanum and camphor, until reaction takes place.

The exacerbation having subsided, our treatment should be directed to the prevention of its return, and my invariable rule is *never to permit the occurrence of another paroxysm after I see the patient.* But, it will be asked, can this rule be carried out? I answer that it can *in the great majority of cases*, and that in those in which we fail to accomplish all we desire, we yet so modify the state of things that success is almost certain on the day following. If we be fully impressed with the belief that the fever being once arrested the patient will rapidly return to health, the importance of the rule cannot fail to be appreciated; and that such is the fact will not for a moment be denied by any who have ever tried the practice we recommend. I repeat, that if all our efforts be directed to the prevention of another paroxysm—if we resolve never to allow a patient to have another exacerbation after we see him, the cure of remittent fevers will almost invariably be effected in a day or two.

In the accomplishment of our resolve, quinine must be regarded as the sheet anchor of our dependence, for although we may resort to other means, these can never be but of secondary value. Nor is it necessary in ordinary cases to use such large quantities of the quinine as are recommended by some. The quantity I use in one remission is usually from 15 to 20 grs., but I have sometimes given 30 or 40 grs.; never more. It is rare that less than 15 grs. will prevent the expected paroxysm. Whatever be the quantity we may estimate as necessary, this should be given in such a manner as to have the system fully under its influence an hour or two before the time of the previous exacerbation, and to continue its influence a couple of hours after this time. If the period of remission be eight hours, we may administer 2 grs. hourly—if it be five hours, we may give 3 grs. hourly—if three hours, 5 grains hourly—and if only one hour, we should give 20 grs. at once, and smaller doses subsequently, if necessary, to insure success. According to my observation the *number* of doses is a matter of but little moment—the *quantity* given in a remission is all important. This will depend upon the violence of the attack, the number of paroxysms that have occurred before we see the patient, and the kind of treatment to which he may have been previously subjected. As a general rule, the quantity should be increased as the period of remission is shortened, and in proportion to the number of paroxysms that have preceded its use. I am inclined to think also that it requires more quinine to prevent a paroxysm in

one who has been depleted or acted on by emetics and cathartics than in one who has previously been sujected to no medication. The *convalescence* is certainly more rapid when no debilitating process has been instituted, and health is almost immediately restored if the disease be arrested with quinine on the occurrence of the very first paroxysm. There is some choice in the mode of administration, for the sulphate of quinine will act more slowly if given in powder than in solution, and still more so in pills than in powder. Whenever, therefore, a prompt effect is necessary, the solution should always be preferred. If the stomach will not retain it, it may be thrown up the rectum with a little flax-seed tea or thin starch, in about the same dose as if given by the stomach. In this way it acts remarkably well, and, in the treatment of children, who evince great reluctance to its taste, this mode of administration is peculiarly happy.

But the query is often made: would you give the quinine in cases of remittent fever in which the head is evidently affected,—when there is intense cephalagia, or coma, or delirium? in cases in which the stomach seems implicated—the patient vomiting frequently and rejecting everything he takes? in cases in which the bowels are too loose, or very easily disturbed? in cases in which the liver is either torpid or secretes inordinately? in cases in which one paroxysm runs into the succeeding so completely as scarcely to leave any remission of consequence? I answer, unequivocally, yes—and that the stronger the tendency of the disease to localize itself, the more urgent is the necessity to arrest it; for this tendency will increase with every paroxysm, and cease as soon as their return be checked. Let us always bear in mind that the paroxysms are not *occasioned* by the affection of the head, stomach, bowels, or liver, but, on the contrary, that these are the *consequences* of a deranged innervation and of the paroxsmal condition, and our duty is plain. Let us not be alarmed by the bug-bear inflammation and vitiated secretions, nor be deterred from the use of quinine because some still believe it a stimulant, and our success will very soon eradicate every vestige of former prejudices on this subject. It was not without much difficulty that I succeeded a few years ago in persuading a planter, who had long been in the habit of looking on bilious fever as occasioned by the presence of vitiated or superabundant bile, and who consequently treated his negroes with emetics, cathartics and mercurials, that if he would use quinine at the outset, his hands would be in the field in a few days, instead of losing from ten to fifteen days whenever attacked by fever. And yet, after he had fully satisfied himself of the advantage of the proposed change of treatment, his first observation on meeting me was always—"what becomes of the bile? I am afraid that it is still in the system and will again do mischief?"

In order to illustrate some of the positions I have assumed, I will relate a few cases in which the remission was very light, and the tendency to localization imminent.

On the 12th of October, 1841, I was called to see a lad about 10 years of age, and found him in the height of the second paroxysm of

a most violent attack of remittent fever. The pulse was full, strong and active; the heat of the surface intense; he complained of violent head-ache, yet was incessantly tossing himself about the bed in wild delirium; his stomach and bowels were quiet. I had but a few days previous seen a patient about the same age, and in the same neighborhood, succumb (without quinine) in the third paroxysm of a similar attack, and I had every reason to apprehend a similar issue in this case, if another paroxysm were permitted to occur. It was now 2 o'clock, P. M. and the next paroxysm was expected to commence at 8 in the evening. He had taken a cathartic the day before I saw him. I immediately opened a vein, to prevent increased injury to the brain, and abstracted blood pretty freely; then applied a blistering plaster over the dorsal region of the spine, and commenced the use of quinine in doses of 2 grs. every hour. At my evening visit (7 o'clock,) I found him quiet, free from delirium, and with very little fever. Ordered the quinine in doses of 1 gr. hourly through the night The next morning I found him sitting up without fever, and wishing something to eat. He had no return of fever, took no more medicine, and was perfectly well in a few days. I would remark that the delirium entirely subsided only after he had taken several doses of quinine. I have since given it during delirium, without bleeding, and with equally good effect.

On the 28th October, 1841, I was requested to visit a gentleman, about 45 years of age, on the 5th day of a severe remittent fever. I found him with high fever, lying on his back, and so comatose that it was with considerable difficulty that he could be made to notice questions, to which he would then make incoherent replies. His surface was moist with perspiration, though warm. His pulse was frequent, and somewhat strong, but not sufficiently so to warrant bleeding at so advanced a stage of the case and especially as he was of intemperate habits. He had taken two or three cathartics—and the onset of the next paroxysm was expected in three hours. The case was such, that death must of necessity attend the supervention of another paroxysm. Under these circumstances I ordered 5 grs. quinine in solution every hour, and remained to watch the effects, for I was not at that time as well acquainted with them as at present. Indeed I had not before ventured the use of quinine under a similar determination to the head. The administration of each dose was attended with manifest improvement, so that when the time arrived for the recurrence of the paroxysm, my patient was perfectly lucid, had no stupor, and but little fever. I then left him, with orders to take 1 gr. of the quinine hourly, for twelve hours. On the following morning he was sitting up, without fever, and had none afterwards. A mild laxative was all he took during the rapid convalescence.

During the same month, I attended a girl 8 years of age, whose remittent fever was marked by great gastric irritation, so as to cause her to reject every thing she took; quinine solution administered *per rectum* as readily controlled the disease in this as it did in the above cases.

More recently, I saw a gentleman who had been seized at 9 o'clock A. M. with a chill, which was soon followed by the most intense head-ache, intolerance of light, pain in the back and limbs, as well as at the epigastrum. Being of a sanguineous and plethoric habit, I bled him; then applied sinapisms to the spine and epigastrium, and prescribed a beverage of cream of tartar and cold water. In the afternoon I found that the fever was still high, that he had vomited repeatedly, was much distressed with nausea, and had been gently purged. The sinapisms were ordered to be repeated, the cream of tartar to be discontinued, and small quantities of iced water to be used to relieve thirst during the night; doses of 5 grs. quinine (in powder) were left, one to be taken in very little water at 4 o'clock the next morning, and repeated every two hours thereafter. I visited him at 8 A. M. and found that the fever had continued high during the night, and remitted only towards morning. He had taken 15 grs. quinine, and now had but little fever, although the nausea still persisted, and had caused him to reject the quinine twice, but which being repeated was finally retained. During this day the febrile exacerbation was much less intense, and he was kept on the use of iced water with a little lime water added to it. On the following morning, the nausea still being troublesome, and, apprehending that the quinine in solution or in powder would be rejected, I gave it to him in pills, 4 grains every two hours until he had taken 16 grains. These were retained, the nausea gradually subsided with the fever, and in the afternoon he was convalescent. He suffered a little from debility, but without further treatment, he was out in a few days. In this case head-ache and, gastric irritation instead of being increased, *subsided* under the use of quinine.

We are frequently called to cases in which we cannot ascertain the periods of exacerbation and of remission because of the ignorance of the patient or of his attendants, or because those periods are not very strongly defined. In such cases we may safely presume that the remission, if there be any, will occur in the morning, as this is most usually the case in these affections. And, under this presumption, I always prescribe about 20 grs. of quinine to be given in 5 gr. doses at intervals of two hours, commencing at the dawn of the next day, without regard to any incidental circumstances. This last injuction is added, because without it the attendant may upon some trivial change assume the responsibility of omitting the remedy at the only time when it might be given with decided advantage. I have known several cases to terminate fatally by such omission to carry out the prescription; the excuse being that the patient had too much fever, or head-ache, or nausea, &c. We not unfrequently see cases so late that the life of the patient depends entirely on our ability to prevent another paroxysm. No circumstance then must be allowed to interfere with the use of the only certain preventive with which we are acquainted. If it cannot be given in one form it must be given in another; if the stomach rejects it, throw it upon the rectum. At all hazards, give it. If by this course you happen to

give the quinine before the remissions have been fully established, it will not increase the fever, but on the contrary lessen its intensity, and consequently hasten the establishment of the remission. We frequently induce a very decided remission in cases in which it has previously been very slight, by the administration of quinine a short time after the fever has reached its acme of intensity, as may be seen by reference to the cases just related.

Having thus far restricted my remarks to the use of quinine in fevers uncomplicated with true phlegmasia or inflammation, it is proper that I say a few words in relation to cases we occasionally encounter, in which genuine phlagmasiæ are complicated with remittent fever or the paroxysmal peculiarity. I allude now specially to the form of Pneumonia and Pleuro-pneumonia which has prevailed more extensively in Georgia and South Carolina, (and perhaps in other southern states) during the last year or two than formerly, and which has been attended with an extraordinary degree of mortality. From what I have seen of such cases, and learnt from my professional brethren here, and elsewhere, I am satisfied that whilst the most striking element of the disease is an inflammation of the pulmonary organs, this is complicated with remittent fever. Indeed they present regular diurnal or tertian exacerbations and remissions of such decided character as to mislead the friends of the patient, and even his physician, into a degree of security which has often proved fatal. Seized with a violent attack of pneumonia, the patient finds himself at once quite ill, but is soon relieved from anxiety by an apparent amelioration of his condition. This continues until the next day, or perhaps the third, when another exacerbation supervenes and rapidly aggravates the condition of the lungs; but the intensity of the symptoms again abates, and the patient is flattered with the hope of approaching convalescence, until a repetition of the paroxysmal affection places his life in imminent peril, if not beyond the reach of remedial means—and all this notwithstanding a vigorous antiphlogistic course of treatment. This disease has been particularly fatal on our plantations, where the daily or tertian amendments of the patient have induced the owners or overseers not to call in medical aid as early as they would have otherwise done.

In all the cases of pneumonia, complicated as above stated, that have come under my observation, I have not hesitated to combine the use of quinine with that of the lancet, antimonials and opiates, and have uniformly had every reason to be entirely satisfied with the result. They do not require, nor can they bear, the same amount of depletion usually regarded as necessary in common pneumonia and pleurisy, and they very rarely yield to antiphlogistics alone. In furnishing my own testimony to the efficacy of the suggested combination, I might add that of other practitioners of distinction, who, entertaining the same views with myself, have met with similar success. It is scarcely necessary to add that the quinine should be given during the periods of remission, and as liberally as though there were no organ in a state of inflammation.

I have now freely and without reserve, given my views in relation to the use of quinine in our remittent fevers—and in lauding, as I have done, its efficacy, I cannot but apprehend that the charge of ultraism will be preferred against me by those who are still unacquainted with its properties. Be this as it may, I fear nothing from the test of time and experience, and will be amply compensated for the temporary odium, if this article will induce any who may have been backward in the use of quinine to give it a fair trial under the circumstances here recommended. It should be borne in mind, however, that we occasionally meet, even in this latitude, cases of typhoid fever, or of enteritic fever, in which quinine possesses no peculiar efficacy. But these fevers do not present the paroxysmal type, and can therefore be easily distinguished from those in which it is useful.—*Southern Med. and Sur. Jour.*

Excision of the Inferior Maxillary bone for Osteo-Sarcoma. By William H. Deaderick, M. D., of Athens, Tennessee.—The operation of which I propose to give a very brief account, was performed nearly thirty-seven years ago, and at that period, so far as I am informed, was unknown in surgery. Since that time it has been repeatedly executed, and the claim of having originated it has been set up by a foreign surgeon. By comparison of dates it will be seen that my operation preceded that of M. Dupuytren by two years.

On the 6th of February, 1810, Jesse Lay, a lad of about fourteen years of age, was brought to me on account of an excrescence which gradually arose from his gums, and which, in consequence of long neglect, completely enveloped the lower maxillary bone of the left side. It filled the inside of his mouth to such an extent as greatly to interfere with respiration and deglutition. Externally, the tumor exhibited the appearance of a wen of considerable size, and as it was daily augmenting it was evident that nothing short of its entire removal, with the portion of the bone it occupied, could save the life of the patient. Accordingly an incision was commenced just below the left ear, and continued along the course of the bone to the centre of the chin; a second one was made at right angles to the first. The integuments were then dissected from the tumor, and the bone sawed off at the angle of the jaw, and half an inch from the centre of the chin nearest the angle divided. The integuments were united in the usual manner, and the boy had a speedy and perfect recovery. The youth at the time of the operation, although fourteen years of age, was not larger than boys usually are at ten or eleven; but immediately afterwards commenced growing, and attained the ordinary stature of manhood. A well trained whisker hides, in a great measure, the scar left by the incision, and at a short distance the effects of the operation would not be observed.

Athens, Nov. 1st, 1846.

Note. Dupuytren is the generally accredited author of the operation above described. This distinguished surgeon removed a portion

of the lower jaw for a cancerous affection of the gums in 1812. The operation of Dr. Deaderick, it will be seen, was performed two years prior to that time. Dupuytren's case was reported to the Faculty of Medicine at Paris, by Lisfranc, in 1813. The report of Lisfranc is republished in the *Dictionnaire des Sciences Medicales*, vol. xxix. p. 430. Dr. Deaderick did not give to the public any account of his operation before 1823, when he described it in the American Medical Recorder.

Dr. Mott, in a letter to Mr. Liston, has preferred a claim to priority in this operation. He says, "I claim for myself and my country *originality* in the operation of exsection of the lower jaw at the tempo-maxillary articulation, and in different proportions for osteo-sarcoma. I avow and declare solemnly that before my first exsection of the lower jaw for osteo-sarcoma, I never saw, read or heard of anything of the kind ever having been done in any country." He adds, "We repeat and aver, that the exsection of the lower jaw of even a fourth part, much less a half or two-thirds of it, for any form of sarcoma involving the whole texture of the bone, has never in our opinion been performed by any surgeon, past or present, until by myself at the time above stated."

The operation of Dupuytren is admitted not to have been for osteo-sarcoma, but for a cancerous sore situated over the angle of the jaw. Ribes, in the *Dict. des Sci. Med.*, referring to this operation, has the following words: "These facts lead to the hope that fungus, or osteo-sarcoma of the lower jaw, a disease so formidable that it has in many cases been vainly attacked with the iron and fire, will henceforward, since the operation of M. Dupuytrén be removed by amputation of a portion more or less considerable of the lower jaw without the danger of any accident, and, if the disease be local, with the certainty of success."

Many years before these predictions were uttered in Paris, the operation had been successfully performed by a young surgeon in the backwoods of Tennessee.

In a lecture delivered by Dr. Houston, of Dublin, in 1844, and published the same year in the London Lancet, the honor of having originated this operation is claimed for Mr. Cusack, who has performed it twelve times. The lecturer says, "The grand exploit of amputating the lower jaw, even from its articulations, the boldness of which has been only equalled by its success, has now become a standard operation in surgery. Persons afflicted with the distressing and loathsome disease for which this operation is undertaken, were formerly allowed to die, without any idea being entertained of the possibility of saving them; but now that a great mind, relying on a sound knowledge of the capabilities of the human frame, has set the example of extirpating the diseased mass *in toto*, many surgeons have fearlessly followed in the path thus laid open for them, and have derived honor from the success which crowned the enterprise. The success of this operation, both as regards immunity from danger, rapidity of convalescence, and the useful quality of masticatory apparatus which follows, is almost incredible."

Upon this passage Dr. Townsend, in his edition of Velpeau's Surgery, comments thus: "To whomsoever, therefore, the honour of this great triumph belongs, *mutatis mutandis*, the eulogium ought to apply equally well in Dr. Houston's conceptions, who, doubtless, would not desire to diminish one iota of it, because a name of different orthography from that of the justly respected Mr. Cusack, should happen to be found by a species of anaplastic substitution, to dovetail more completely than his with the historic facts in the case. We say cheerfully with all our heart *palmam qui meruit ferat!*"

Dr. Deaderick's is the name which seems "to dovetail" *most* "completely with the historic facts," and to him, therefore, must the palm be awarded. True, he operated but once, and his operation was not made known to the world for many years afterwards; but it was undertaken for what appears to have been osteo-sarcoma; it involved the excision of nearly one-half of the lower jaw bone, and was crowned with perfect success. Dr. Deaderick did not call the disease *osteo-sarcoma*, but, in his account of his operation published in the Medical Recorder, described it as "a cartilaginous tumor." In the brief notice of it given above he applied no name to the affection, and the title prefixed to his communication is ours. Every medical reader knows how vague is the term "osteo-sarcoma," and what a diversity of morbid growths are called by that name. From the description of the tumor in Dr. Deaderick's case we have no doubt it would be styled osteo-sarcomatous.

It appears, then, that Dr. Deaderick preceded Dupuytren in the operation of excising the lower jaw bone two years, and that he anticipated Dr. Mott by eleven years, although he neglected to publish an account of the operation until after Dr. M. had communicated the results of his to the world; consequently Dr. M. was unapprised of what had been done by his countryman. He may still claim "for his *country*," if he cannot for himself, "originality in the operation," for Cusack's operations were performed two or three years subsequently to Dr. Mott's first. The operation has been performed by Dr. M. seventeen times. In a note appended to his letter to Mr. Liston, Dr. Deaderick's operation is referred to, and this brief, obscure notice is all the allusion to it that we have found in looking through the American edition of Velpeau's great work on surgery. We have deemed it but an act of justice to a modest and worthy member of the profession to give these dates in connexion with the history of his case.—*Western Journal of Med. and Surg.*

A large Tumour of the Mamma, spontaneously cured. Reported by A. B. Greene, M. D., of Sumter County, Georgia.—The subject of these remarks is a negro woman belonging to Col. M. A short time after she arrived at the usual age for the full development of the sexual organs, the right mamma was observed to be largest, and increased in dimensions gradually and continuously, unattended with pain, except what was induced by its suspension, when not properly supported. About twelve months preceding her pregnancy, my at-

tention was first called to an examination of the enlarged mamma, and I found all the usual evidences of simple sarcoma present, with nothing of a malignant character. The skin and subjacent tissues seemed as healthful to the touch, and as free from uneasiness when handled, as any other mass of flesh about the body. Its size already amounted to great deformity, and was obvious to any passing observer.

I did not hesitate to advise her intelligent owner, that an immediate operation was the only certain cure; and pointed out the danger should amputation be deferred, that might result from pregnancy and accouchement, in the development of some malignant tendency, or at least, subjection to severe suffering.

The force of my suggestions was appreciated; but fearing the operation, and trusting to some happy, fortuitous change, it was neglected. She became pregnant, and at the full term of gestation in January last was delivered without any unusual difficulty, and soon felt pain in the enlarged breast for the first time. At the expiration of six weeks, it had grown so rapidly, that while sitting upright the enlarged mamma rested on her lap. It was enormously distended, and of such weight, that however well supported, her chest was strongly inclined forward. I could never detect any circumscribed induration, nor any other evidence of the formation of abscess. She was put upon strict antiphlogistic treatment, medicinal and dietetic. General and local depletives, emollient fomentations and poultices, to relieve turgidity; and the occasional application of the pump and cup to the nipple to encourage a discharge of the milk, should any possibly be secreted.

While these means were being applied, a spontaneous discharge occurred from about an inch above the nipple—in a continued stream it incessantly poured out, until one gallon and a half of a milk-like fluid had come away. Immediate and complete relief was expressed, and no appearance of debility, or other adverse symptom, as a consequence of the sudden and almost incredible quantity dislodged, was observed.

From that time, the breast gradually assumed the size it had attained before her accouchement. Her general health and strength improved daily, and in a short time she was out on the farm at labor, though of an easy kind, and self-imposed. While thus employed, she was exposed to a drenching rain, and in a few days I was summond to visit her again.

I found her now labouring under an acute rheumatism, in its most dangero s and painful form. The pleura was implicated, and a manifest tendency to low typhus rendered her condition very critical.

When we found that she might possibly survive the attack, my attention was again directed to the condition of the diseased breast. Upon examination an ulcer was found, situated near the nipple—the breast again greatly increased in size. The ulcer discharged matter of a thin purulent character, and most noisome odour. Other ulcers were formed, and they soon numbered seven, emitting vast quantities

of insupportable horrid pus-like fluid. By patient perseverance in the use of the chloride of lime, charcoal poultices, and a variety of astringent injections, the discharges assumed a more healthy appearance and less offensive odour.

The patient was now a miserable looking object of emaciation; and to every one her death seemed inevitable. It would be needless to dwell upon the treatment here, constitutional and local.

The largest and most pendent ulcer presented a prominence in the centre, which I found to be insensible. Upon raising it with the forceps, I was surprised to find that by gentle traction a considerable mass was drawn out without any pain. I applied the scissors and separated that portion. There was not a drop of blood discharged. I then seized the remaining mass with a small tenaculum, and readily drew out in a string-like form, a connected volume of flesh coloured substance, until by the pain produced, I supposed the mass to be too large to pass through the ulcer, and again detached it with the scissors.

I now found a large hollow chasm left under the ulcer, and changed the position of the breast to examine the other ulcerated openings, but as they were situated above, nothing unusual presented at them; but when restored to the same situation again, I found the chasm occupied, and another mass presenting. By pulling gently with the forceps at different points, I succeeded in starting another slough through the ulcer, which passed easily, until one entire mass of large size fell from it without the use of any excising instrument. No blood followed, except what escaped from the edges of the dilated ulcer.

There was now an extensive, unoccupied space, left by the large volume of detached slough; and by the aid of the light admitted through the several ulcerated openings, (I fancied,) was seen the original "bona fide" gland, bounding the upper part of this space.

As nature had performed the amputation so well, thus far, I determined not to interfere, in the already exhausted condition of the patient, by removing the now redundant skin.

Our next care was to ascertain the amount of the self-amputated mass, which was attached to the hook of a pair of "draw-spring steelyards, (the only means of weighing at hand) and weighed one and a half pounds. The small fragments, not weighed, Col. M. supposed would amount to at least a half pound more.

We were surprised, at first, that so much bulk and volume should weigh no more; but upon careful examination, I found it composed of a cellular structure, comparable to honey-comb, interspersed with fine particles of a "coffee-ground" colour. The breast was bathed with infusion of red-oak bark, and covered with a large poultice of the same excellent astringent, moistened with solution chloride of lime, and secured by means of bandages, bound on so as to exert due compression on the now flaccid parts. General directions were given for future management, and I did not see the patient from that time, which

was 24th of April last, until a few days since, when I visited her, in order to report upon her present condition.

She has been doing the labour of a hand upon the farm, for some two months now. The remains of the mamma are about half the size of the well-formed natural one—the skin is regularly contracted and adherent—the ulcers are all healed soundly, except a very small perforation, still giving exit to some discharge, of inoffensive appearance. Her general health is perfect in all respects, having recovered her former flesh, activity and cheerfulness of mind.—*Southern Med. and Surg. Journal.*

Remarks on the use of the terms "Congestion" and "Congestive." By Thomas C. Brown, M. D., of Woodville, Miss.—The term *Congestive Fever* has become so familiar in the South and West, that the young and inexperienced are led to look for a distinctly marked and peculiar fever, and are sadly perplexed in their investigations. At one time it is described as "algid intermittent fever," at another as "malignant or pernicious remittent fever." They find it supervening on intermittent, remittent and continued fevers—on gastritis and gastro-enteritis—on typhoid pneumonia—on epidemic dysentery; and in fact, as complicated with most of our summer and autumnal diseases, and sometimes with our winter epidemics.

Would it not be well for the medical profession, if our journalists and teachers of medicine, would teach that "there is not, properly, any fever characterized by *congestion* in contrast with another which is without it;" but that *congestion* is common to nearly all fevers, whether intermittent, remittent, or continued; and that it is not limited to any one organ: the brain, the spinal column, the lungs, the liver, the spleen, the kidnies and abdominal viscera, may be the seats of congestion, either separately or several of them at the same time; and these as they are separately or severally affected, will characterize the symptoms according to the organ or the several organs which may be involved?

The term *Congestion* comes from the Latin *congero*, to amass, and in a medical sense conveys the idea of turgescence or fulness of blood in a particular part, and implies simple engorgement and over distension of the blood vessels. It seems rather the result of irritation than of inflammatory action, and when it passes into inflammation, it would seem to be more dependent on the general state of the constitution, on the plethoric condition of the blood vessels, with the tendency towards inflammatory excitement, than on the primary irritation which occasioned it. The presence of internal congestions must, of course, be inferred from the symptoms which indicate them, and to connect the symptoms with the structural lesions which they denote, so as to furnish practical guidance in the treatment of them, is the proper object of medical research.

Their treatment must depend in part on the nature of their site, but principally on the cause which occasions them. If congestion

result from a plethoric habit, more local treatment can never give permanent and effectual relief; on the contrary, if the congestion be owing to irritation only, then general depletion is unnecessary, and would be injurious.

Congestion generally precedes, but may follow inflammation, by the irritation set up in neighbouring organs, or be transmitted to those more distant by nervous influence. Strong innervation, in which the nervous centres are much excited as under various emotions, will produce congestion, at one time of the brain, at another of the lungs or liver. Certain nervous affections, as hysteria, will give rise to irregular determination and retardation of blood, producing congestion in some organ, which often entirely disappears after the removal of the nervous disturbance. Congestion dependent on mere nervous disorder, will generally be irregular or periodical in its appearance, but if there be a permanent disorder of function in an organ, the congestion depends upon permanent irritation. In the commencement of fevers the congestion is of an irregular or periodic character, but when occurring in the latter stages of fever, it is usually of a more permanent and dangerous character.

Congestion, coming on in the progress of intermittent and remittent fevers, is of frequent occurrence, and when supervening in the latter stages of these diseases, it generally indicates great danger; but when it ushers in an intermittent fever, and the paroxysm is followed by very feeble reaction, it indicates great danger.

The symptoms of the congestion of a particular organ, or of several organs, combining with the sympathy of a particular fever or disease, upon which it supervenes, must, necessarily, give rise to great diversity of symptoms, and will require a variety of treatment as dictated by the existing circumstances. Hence the confusion which results in an attempt to study the symptoms of congestive fever, as a distinct species of fever. If we are to have a *nosology*, in which *congestion* is to be the cognomen of a particular species, we must adopt a division of fever somewhat like the arrangement of Armstrong, and dispense with the distinctions of fever into intermittent, remittent and continued.—*New Orleans Med. and Surg. Journ.*

Blindness Caused by the Use of Sulph. Quinine. By John McLean, M. D., Prof. of Materia Medica in the Rush Medical College. —Quinine when freely administered produces a species of intoxication, tinnitus aurium, a sense of fulness in the head, cephalagia, and other affections; and sometimes, although not so frequently, blindness, more or less lasting.

M. Trousseau, relates the case of a tailor, who, for the relief of a periodical asthma, took 48 grs. of the sulph. quinine, at one dose. In four hours he experienced ringing in the ears, dulness of the senses and vertigo; and in seven hours, he was blind and deaf, his mind wandered and he was unable to walk. These effects, for which no active medicine was administered, gave way spontaneously, during the night. A young girl at the "Hospital Cochin," in consequence

of having taken freely of the sulph. quinine, became affected with amaurosis, which continued at the end of three weeks, notwithstanding appropriate and energetic means were employed for the restoration of her sight.

Dr. Rognetta, who claims for Rasori, priority in the use of quinine in acute rheumatism, "thinks, with the Italian physicians 'that the limits of tolerance should not be exceeded, and that beyond this, a species of poisoning may be induced, known by deafness, blindness, hallucinations, hæmaturia, &.'"

Blindness, although not so common as the other effects, is not unfrequently produced, and may be prolonged for months or even years. It is not, however, generally known, that such may be the result of this medicine, when given in large quantities. The following are some cases occurring in this place and immediate vicinity, which show that when thus administered it may produce blindness more or less permanent.

Case 1st. Mr. P. of the town of Barry, Jackson co., was in the year 1840 attacked with a low grade of remittent fever, the nature of which was such, as to cause the attending physician to administer the sulph. quinine in large and frequent doses. Sixteen grains, (as judged by sight,) were ordered every hour, and continued until nearly one ounce was taken. Before the quinine was discontinued, he became perfectly blind, which, with a slow and gradual amendment, continued during the first year. Later than this, I have not been positively informed in regard to the case, but should judge, from what indirect information I have reeeived, that his sight is not yet perfectly restored.

Case 2d. Mrs. B., of the town of Concord in this county, was, a few years since, reduced so low by the endemic fever of the country, that her life was despaired of. As a last resort large quantities of quinine were given, and while taking it she became blind, which continued for several weeks. As she recovered her health the blindness gave way, and her sight was finally restored. Not being acquainted with the particulars of this case, I can give but these few general outlines.

Case 3d. P. M. Everett, of this place, was, in the autumn of 1843, attacked with remittent fever, and in a few days became so greatly reduced, as to leave but slight hopes of his recovery. Sulph. Quinine was therefore prescribed, in doses averaging three grains, every hour, and was continued for three days. In a short time, he became deaf, and soon after so blind that he could not see a burning candle, when placed immediately before his eyes. The blindness took place on the third day, after the commencement of the free administration of the sulph. quinine. Previous to this, and at this time, his mind, (with the exception of occasional slight wanderings) appeared to be perfectly clear. After some weeks, his sight became partially restored, but continues more or less imperfect, even at the present time.

During the greater part of the first year, he could look steadily at

the sun, without seeing it, or even any painful sensation being produced. When he first began to see sufficiently to read, which was in the course of the first year, he could perceive but a small luminous spot upon the paper, about one inch in diameter, within which he could distinguish letters, but all without this was cloudless and confusion. During this time, the pupils were very much dilated, and he could see objects at a distance much better than those near by. His sight has continued to improve, ever since; and at the present time, although quite imperfect, is sufficiently good to enable him to read and write, although with some difficulty. The pupils are still considerably dilated, and it is with great difficulty, that he can discern objects by twilight. The direct rays of the sun upon the head, produce pain there, accompanied with a painful sensation deep in the orbit of the eye, and a disordered vision. At the present time, exercise easily produces fatigue, by which his sight is much impaired.

Case 4th. In the month of April, 1846, Dr. R. of this place took in doses of six grs. each, three drachms of quinine in 36 hours; at the expiration of which time, he became perfectly blind. His hearing was somewhat blunted, although it did not, in degree, equal the blindness. On the two succeeding days, his sight, although very imperfect was considerably restored. Had he lived, the probability is, that this imperfect sight would, as in the former cases, have continued a considerable length of time.

Remarks.—We think it clear that the blindness in the foregoing cases was the effect of the quinine; for we see it in each, coming on suddenly during its administration in large quantities, and at a time, when no other medicine was given that would be likely to produce such results. Here, cause and effect appear to be closely connected, and are so plain, as scarcely to admit of the possibility of a doubt. From the symptoms accompanying the foregoing cases, we judge that the proximate cause of the blindness, was mainly an affection of the retina or optic nerve, producing amaurosis.

I have recorded the foregoing facts, with the hope that they might be the means of causing some useful suggestions, in relation to the physiological effect and administration of this medicine.

In connection with the foregoing, we might mention the case of Mr. B. Porter, of this town, who has had for sixteen years and upwards, amaurosis of the left eye, which he supposed to have been produced by the application of a strong subacetate of copper ointment to that side of the face, for the purpose of curing *Herpes circinatus.* As the ringworm gave way, the blindness came on.

About one year since, he suffered with a periodical neuralgia, for which I ordered 32 grs. of quinine to be taken in divided doses of 4 grs. each, every two hours. Under its influence, the neuralgia disappeared; and on the following day, he could see objects quite distinctly with the amaurotic eye, much better than ever before, since it first became diseased, and he was much elated with the thought

of soon regaining its sight. He, however, took no more quinine, and in a few days, the benefit produced to that eye was entirely lost.

Jackson, (Mich.) Sept. 22, 1846.

Illinois and Indiana Med. and Surg. Jour.

On the Effects of Mercury on the Young Subject.—By John B. Beck, M. D., Professor of Materia Medica and Medical Jurisprudence, in the College of Physicians and Surgeons, of New York. In some previous papers, I endeavoured to point out the peculiarities attending the operation of Opium and Emetics, on the infant subject, as distinguished from the effects of these agents on the adult. I now propose to make some remarks on another article of even still greater importance, and that is *Mercury*. That Mercury is an agent of immense power, either for good or evil, upon the human constitution, cannot be questioned. While in many cases it is the means of saving life, in not a few it unquestionably destroys it. If this be so, it becomes a question of the deepest practical interest, to determine whether its action is modified in any way by the age of the patient, and particularly so, when it is recollected that it is given by too many physicians, even more freely, and may I not add indiscriminately, to the young subject than to the adult.

The first and most striking peculiarity attending the action of mercury is, that in young subjects, it does not produce salivation so readily as it does in adults. Indeed, under a certain age, it appears to be exceedingly difficult to excite salivation at all in them. On this point, besides our own experience, we have abundance of testimony. Dr. Clarke says, "under various circumstances he has prescribed mercury, in very large quantities, and in a great number of cases; and he never produced salivation, except in three instances, in any child under three years of age." Dr. Warren, of Boston, observes, "that he has never known an infant to be salivated, notwithstanding he has given in some cases, large quantities with this view." Mr. Colles, of Dublin, says, "no man in the present day requires to be told that mercury never does produce ptyalism, or swelling and ulceration of the gums in infants." Drs. Evanson and Maunsell speak still more strongly. They say, "mercury does not seem capable of salivating an infant. We have never seen it do so, nor are we aware of any such case being on record." "We have never succeeded in salivating a child under three years of age."

The same general fact seems to be applicable to the external use of mercury. Dr. Percival, of Manchester, remarks, that he "repeatedly observed that very large quantities of the Unguentum Cœruleum may be used in infancy and childhood, without affecting the gums, notwithstanding the predisposition to a flux of saliva, at a period of life incident to dentition."

That salivation does not take place so readily in the infant as in the adult, would seem then to be well established. That it never can or does take place, as might be inferred from some of the preceding quotations, is by no means, however, true; and the statement,

if implicitly relied on, is calculated to be the cause of much mischief. That very young subjects do sometimes become salivated, is unquestionable. One case, and only one, however, has occurred in my experience, in which a child of two years of age was salivated, and that by a very moderate quantity of calomel, viz., five grains, given in three portions, at intervals, within the space of about twelve hours. In about two days after, the gums became inflamed, the tongue swelled, several ulcers appeared in the mouth, and the flow of saliva was free; after continuing about three days in the same state, it gradually yielded, and disappeared without any further inconvenience. In this case every thing seemed favourable to the developement of mercurial action. The child had been labouring under hooping cough for several weeks, and was a good deal reduced. It vomited freely with every paroxysm of coughing, and this no doubt aided in bringing on salivation, in a constitution peculiarly sensitive and evidently scrofulous. Nor is this a solitary case. Dr. Clarke, already quoted, admits that in three cases salivation was produced in children under three years of age. And similar cases have been observed by others. Dr. Blackall relates the case of a child, two years of age, who was salivated in consequence of taking two grains of calomel for several successive nights. The child was a poor scrofulous subject, and it sunk under the effects of the mercury.

This, then, is a remarkable peculiarity in the action of this agent upon the infant subject, and the observation of it has doubtless led to the belief, too prevalent among some physicians, that it may be given to them to almost any extent with perfect impunity; an error, which, if not in its immediate, yet certainly in its remote effects, has been the prolific source of more mischief, probably, than any of us are aware of.

Although mercury so seldom salivates infants, yet, notwithstanding this, it cannot be doubted that it affects the system profoundly, and even more so proportionally than it does the adult. That it should do so appears perfectly natural, when we reflect upon the mode of its operation on the human system. On this subject, I am aware that a great difference of opinion exists. By some, mercury is looked upon as a stimulant; while others view it as a sedative. A familiar acquaintance with its effects, however, will show, I think, that it may be the one or the other, according to circumstances—according to the dose in which it is given—the length of time it is continued, and more especially, the condition of the system at the time of using it. A single large dose of calomel will cause nausea and relaxation, and sometimes unpleasant prostration, while if it be given in smaller doses and repeated frequently, it will occasion irritation of the intestines, and general disturbance of the vascular and nervous systems. In the former case acting as a profound sedative, and in the latter as a stimulant, or rather irritant. That calomel given in large doses operates as a sedative, seems to be proved, not merely by the nausea and prostration which it frequently produces, but by other considerations. In dysentery, for example, in the adult, a dose of twenty grains of calomel will sometimes allay pain and irritation,

with as much certainty as a dose of opium. For the purpose of testing the effects of calomel, some interesting experiments were made by Mr. Annesley, which would seem still further to show, that in large doses the action of this agent upon the mucous membrane of the stomach and intestines, is that of a sedative. He took three healthy dogs, and gave to one, ʒj. of calomel, to a second, ʒij., to a third, ʒiij. After this they were tied up in a room.

"The dog which took ʒj. did not appear to feel any kind of sickness, till six or seven hours afterwards, when he vomited a little. He was lively the whole time, and ate his food well; had been purged two or three times; dejections of a black grey colour.

The dog which took ʒij. was likewise lively, and ate his food well, vomiting two or three times, and was purged more than the other; he passed tape worms and the dejections were black.

The dog which took ʒiij. was heavy, and apparently uncomfortable the whole day, and did not vomit at all; he was purged, and passed a very long tape worm; dejections also black."

Twenty-four hours after they had taken the calomel, the dogs were all hung, and five minutes after they were dead, they were examined, and the vascularity of the stomach was found to be in the inverse ratio of the calomel they had taken; i. e. in the dog which had taken ʒiij., the vascularity was the least, and so on. For the purpose of comparing this with the condition of the stomach of a dog which had taken no calomel at all, an examination of another dog was made; and here the stomach was found to be *more vascular* than in any of the others. From these experiments, Mr. Annesley drew the conclusion, that "the natural and healthy state of the stomach and intestinal canal is that of high vascularity, and that the operation of calomel in large doses, is directly the reverse of inflammation."

The foregoing considerations would seem to show that calomel in full doses is a local sedative, and in its general effects, is debilitating to the system at large. Hence its great utility and value as a remedy in many inflammatory diseases.

When, on the other hand, it is given in small and repeated doses, it acts not unfrequently as a local, as well as a general irritant, producing immoderate action of the bowels, and general irritation of the nervous and vascular systems. Now these, we know, are the effects observed continually in the adult, and it is but reasonable to suppose that all of them must, as a matter of course, be aggravated in the more delicate and sensitive system of the infant.

What shows incontestibly that the action of mercury is actually more energetic on the infant than the adult, is the fact, that when salivation does take place in the former, as it sometimes does, its effects are most disastrous. Sloughing of the gums and cheeks, general prostration, and death are by no means uncommon occurrences. On this subject, Dr. Blackall justly remarks, "a general opinion prevails, that the constitutions of young subjects resist mercury. Its entrance into the system they certainly do resist, more than we could expect; but they are greatly overcome by salivations, and the possi-

ble occurrence of such accidents may well set us constantly on our guard." Dr. Ryan, too, says, "Ptyalism of infants is often followed by sloughing of the gums and cheeks; and this I have known to occur after the use of it in Hydrocephalus."

Besides being more energetic in its action on the infant, mercury is also more uncertain. This must necessarily be the case, and for the same reasons that every other active agent is so. In the adult we know that mercury varies in its effects, according to the condition of the system, and the peculiarities of the patient's constitution. Thus some persons are salivated by the smallest quantity of this metal, while others resist the influence even of the largest quantities. In some, febrile action; in others, diarrhœa and exhaustion take place even from moderate doses. Hence it is, that every prudent physician, if unacquainted with the previous history of his patient, makes it a special subject of inquiry to ascertain whether he has ever taken mercury previously, and how it affects him. Now, in the young infant, of course, as we cannot so well have the benefit of this information, more uncertainty must neccessarily attend its operation.

These, then, are the peculiarities attending the operation of mercury on young subjects, viz: that they are salivated with great difficulty, and that notwithstanding this, the effects of it are frequently more energetic and uncertain, than they are in the adult. And it is upon these as the basis, that I propose to make a few remarks bearing upon the practical application of it in young subjects.

1. If salivation occurs so rarely in children under a certain age, then it is evident that it can never be made a criterion by which to judge of its influence on their systems. To attempt, therefore, to produce this effect, as we do in adults, is manifestly improper. In cases where it is desirable to get the system under the full influence of the remedy, other modes must be resorted to for the purpose of judging to what extent the use of the article should be carried. Now this is by no means easy. Even in adults, where we have the benefit of salivation as a test, all practical physicians are aware how difficult it is frequently, to decide when it is proper to stop the use of the remedy. How much more so must this difficulty be increased in the young infant, where we are left without this guide. The only modes of judging, of course, are the character of the evacuations from the bowels, and the general impression made upon the disease for which it is administered. Both these are evidently, however, uncertain. It is to be feared, therefore, that for the want of a more certain guide than we at present possess, the use of this remedy is, in many cases, unnecessarily protracted to the great detriment of the little patient. From all this the conclusion is obvious, that in the use of this article in the young subject much greater caution is necessary than in the adult.

2. The fact that mercury may prostrate and destroy a young child, even though it does not cause salivation, it is to be feared is not sufficiently appreciated, at least by some. We have known calomel given without weight or measure, to a young child, and the reason

assigned to justify it was, that it could do no harm, because it would not salivate. Now it appears to me that no opinion can be more unfounded, and no practice more mischievous. Although a single dose of calomel, even though large, may be well borne by children of ordinary strength of constitution, yet even this is not entirely safe in all cases. And when these doses are frequently repeated, particularly in delicate habits, the most serious consequences may result.

3. The use of mercury in young subjects as an alterative, should in all cases be conducted with great caution. There is no practice more common than that of continuing the use of this agent in small doses, for a considerable time, and certainly none which is more liable to abuse. Under the idea that the dose is so small and from no salivation appearing, we are apt to infer that even if the medicine is not doing any good, it is certainly not doing any harm. Any improvement, too, which occurs during the use of the article, is sure to be attributed to the silent operation of it on the system. Now although this is not unfrequently the case, yet it is not invariably so; and every observing physician must have been aware of cases, in which, in this way, the article has been unnecessarily and injuriously continued. In bowel complaints, under the idea of altering the secretions, it has frequently, no doubt, helped to keep up the very intestinal irritation which it was given to correct. In other cases it has developed the latent tendency to other diseases, such as Scrofula, Phthisis Pulmonalis, etc. In adults we know this to be very often the case. How much more likely is all this to happen in the young infant.

4. In the use of mercury in young children, great care should be exercised in ascertaining, as far as possible, their constitutional peculiarities. This, of course, is not in all cases easily to be done. A good deal, however, may be learned from an acquaintance with the tendencies of the parents. Whenever the parents show indications of scrofula, or where there is an hereditary predisposition to consumption, great caution ought to be exercised in the use of mercury in their offspring.

5. Mercury should be administered with great caution, in cases where a child has been sick for a considerable length of time, and when the strength of the child has been very much reduced. In this state of constitutional depression, a single cathartic dose of calomel sometimes proves fatal. We think we have seen more than one case, in which a child has been irretrievably prostrated under these circumstances, under the false impression that calomel is an innocent purgative to a child.

6. The too common practice of giving calomel as an ordinary purge, on all occasions, is certainly unjustifiable. From the facility with which it may be given, it is unquestionably resorted to in a great number of cases, where it is certainly unnecessary, and in a great number where it positively does harm. The misfortune is, that its use is not limited to an occasional dose, but it is too often given in every slight indisposition of the child. Now, in this way, there

can be no question that the use of it has laid the foundation for the ruin of the constitutions of thousands. It ought to be a rule laid down and rigidly followed, that in very young children, mercury ought never to be used as a cathartic, unless there is a special reason for resorting to it. In a great majority of cases, milder cathartics are decidedly to be preferred.

In concluding these observations, I trust it may not be supposed, that my intention has been to undervalue the importance of mercury as a remedy in the diseases of children. On the contrary, no one appreciates it more highly than myself. In many cases, nothing can supply its place, and its judicious use has been, and is, the instrument of saving multitudes of lives. Notwithstanding, however, the many cautions to the contrary, it is to be feared that the use of it is still too general and indiscriminate. Indeed, the amount of it which is taken by the human race in one way or other, is incalculable. What is given by regular physicians, is perhaps the smallest quantity. If the public really knew how much of this article is swallowed unknown to themselves, in the shape of bilious pills, worm lozenges, and the white powders of the Homœopaths, they would be amazed at their credulity in deserting their old medical advisers, because they have the boldness to give them an occasional dose, and the honesty to tell them so.—*New York Annalist.*

Remarks on Strangulated Umbilical Hernia, with a Case, by A. J. Wedderburn, M. D., Professor of Anatomy in the Medical College of Louisiana.—Strangulated umbilical hernia, being an affection of very rare occurrence in the adult male, it is deemed proper to report the following case for which a successful operation has been performed.

A negro man of 300 pounds weight, aged 31 years, the property of Dr. Slone, residing about two miles below New Orleans, states that he has always had an umbilical hernia, easily reducible, and about the size of a hen's egg—was attacked with a pain in the abdomen—found the tumour enlarged—attempted its reduction, but failed. I saw this case about 12 hours after the strangulation occurred, and found the tumour about the size of a child's head, very tense and elastic. About three hours before I saw the case Dr. Slone had used the various means recommended for reduction in such cases, and on my visiting the case with him, we further endeavoured for the space of an hour, to effect it by taxis, and to aid in the attempt we administered tartar emetic, tobacco injections, large injections of cold water with a hydrostatic injecting tube, and applied ice and sulphuric ether to the tumour. These efforts having failed, we determined upon an operation as the only means calculated to afford the patient a chance for his life. A short time previous to the operation, whilst making forcible taxis, a considerable portion of gas contained in the incarcerated bowl escaped with a gurgling sound, and the tumour seemed to subside so rapidly under my hand, that I was induced to believe that I had succeeded in the reduction, but in a few minutes was con-

vinced that the intestine could not be returned, or even the escape of more of the gas effected. By this effort the tumour was reduced so much by the escape of air from the intestine, and the tension consequently so much relieved, as to lessen the danger of wounding the intestine in dividing the integuments. We informed the patient of the necessity of an immediate operation, to which he somewhat objected, and only consented after we had allowed him to make an effort at reduction himself, which he continued for something like ten minutes, using all the while considerable and well directed force, for he had returned the intestine so often himself when the hernia was smaller and reducible, that he had acquired quite a degree of dexterity in the matter.

Operation.—An incision was made upon the top of the tumour three or four inches in length through the skin in a vertical direction, so as to expose the superficial fascia, which was considerably condensed. A small opening was made through the fascia at the lower part of the wound, by light and careful touches with a scalpel, into which a director was introduced, and carried to the upper part of the first incision, and the fascia divided to correspond with the same, with a probe pointed bistoury. I then introduced my finger between the peritoneal sac and the superficial fascia, and carrying it in every direction, easily effected the separation of the two membranes. Finding there was not room to work in, the wound was enlarged by extending it about an inch above, and more than an inch below,—this enabled me to turn aside the integuments, and obtain a good view of the sac, which contained, floating in a nearly transparent fluid, a large portion of the omentum, and as well as I could determine, about fifteen inches of the small intestinal tube, which appeared to be perfectly black. A small opening was next made in the lower part of the sac, by seizing up a small portion of it with a pair of artery forceps, and carefully cutting in a horizontal direction. After the escape of about four or five ounces of fluid, a director was introduced, and the sac divided upon it about four inches. In a few moments the intestine, which presented the dark colour before mentioned, began to assume a red appearance, from the action of the air acting upon the blood contained in its vessels, through the coats of the intestine; from which circumstance, and also from a close examination, I was convinced that the gut retained its integrity, and at once endeavoured to return it by an attempt to kneed in a small portion at a time;—but in my efforts I not only failed, but additional portions of the omentum and intestine were forcing themselves from the abdomen. In order then, that the stricture could be arrived at without endangering the gut, it became necessary to extend the incisions, not only in the integuments nearly to the base of the tumour, but also in the peritoneal sac. The finger was then forced into the umbilical ring, and a probe pointed bistoury passed by its side, with which the structure was divided at the lower part about the fourth of an inch. An attempt was again made to return the bowel, but without success, when a division of the ring was made at the upper part, less

than a fourth of an inch in extent, by which means I was enabled to return the bowel by pushing in a small portion at a time. After returning the intestine, the omentum was returned, and spread out in front of the small intestines, as well as it could be done by the introduction of my finger into the cavity of the abdomen for this purpose.

After returning the contents of the sac, the blood was sponged from the wound, then leaving it open for the space of about 15 minutes, in order that the oozing from the divided vessels might be entirely arrested, the edges of the wound were brought in contact, and three interrupted sutures applied. The skin, which was very loose, was gathered up like a bag, with the sack contained within, but not included in the ligatures, and a graduated compress applied, with the hope that the mass would, if healed, be a barrier to a further protrusion, and effect a radical cure.

The operation was performed on the 23d of September last, and the patient recovered without a bad symptom. Small doses of calomel and opium were administered during four or five days. In ten days after the operation the patient walked across the room and is now entirely well, a radical cure having been effected.

As the operation just described differs somewhat from those recommended by different surgeons, I have thought proper to give below a few extracts, with some general remarks on the subject of exomphalos.

In Cooper's Surgical Dictionary we find the following: "In consequence of the great fatality of the usual operation for the exomphalos, I think the plan suggested and successfully practiced by Sir A. Cooper in two instances, should always be adopted when the tumour is large and free from gangrene; a plan that has also received the high sanction of that distinguished anatomist and surgeon, Professor Scarpa. (*Traité des Hernies, p.* 362.) Perhaps I might safely add, that when the parts admit of being reduced, without laying open the sack, this method should always be preferred. It consists in making an incision just sufficient to divide the stricture, without opening the sack at all, or, at all events, no more of it than is inevitable."

In umbilical hernia, of not a large size, Sir A. Cooper recommends the following plan of operating: "As the opening into the abdomen is placed towards the upper part of the tumour, I began the incision a little below it, that is, at the middle of the swelling and extended it to its lowest part. I then made a second incision at the upper part of the first, and at right angles with it, so that the double incision was in the form of the letter T, the top of which crossed the middle of the tumour. The integuments being thus divided, the angles of the incision were turned down, which exposed a considerable portion of the hernial sack. This being then carefully opened, the finger was passed below the intestines to the orifice of the sack at the umbilicus, and the probe-pointed bistoury being introduced upon it, I directed it into the opening at the navel, and divided the linea alba

downwards to the requisite degree, instead of upwards as in the former operation. When the omentum and intestine are returned, the portion of integument and sack which is left, falls over the opening at the umbilicus, covers it, and unites to its edge, and thus lessens the risk of peritoneal inflammation, by more readily closing the wound.

In Gibson, page 128, we find the following: "Strangulated umbilical hernia very frequently proves fatal, as much from disorder of the intestinal function as from the strangulation. When the usual remedies fail, an operation should be resorted to. This may be done in the following way. An incision, several inches long, is made very cautiously through the integuments and superficial fascia, when the sack, if not absorbed, as it often is, will appear. Into this a small opening should be made, from which fluid in considerable quantity generally issues. The opening may then be enlarged, and a finger carried upwards between the omentum and intestine as high as the umbilical ring. Upon the finger a bistoury is next to be carried through the linea alba, to the extent of an inch, which, in most cases will relieve the stricture sufficiently to enable the operator without much difficulty to restore the parts to their former situation.

"Dr. Physick has proposed, in strangulated umbilical hernia, to make a crucial incision through the integuments, as far as the neck of the sack, then open the sack at its upper part to an extent sufficient to enable the operator to examine its contents, and reduce them, if possible, without dilating the umbilical ring. Should the latter expedient, however, become necessary, the stricture must be divided on the outside of the sack. After the omentum and the intestine are restored to the abdomen, a ligature should be drawn around the neck of the sack, with a view of closing the cavity and obviating peritoneal inflammation. The late Dr. Wistar once performed the operation with success. In the case of a Mrs. N., a very respectable Jewish lady, I performed a similar operation about fifteen years ago. The tumour, however, was as large as a child's head, and had been strangulated several days before I saw the patient, and, on this account, the operation did not succeed. The patient, too, was advanced in years, extremely corpulent, and had long suffered from derangement of the functions of the stomach and intestines. Under these circumstances, no operation, probably, would have answered the purpose, even if performed in the very commencement of strangulation."

In Lawrence, on ruptures, we find the following:

"The greatest practical writers have strongly represented the frequent fatality of the operation for strangulated exomphalos; and the results of my own experience coincide entirely with their statements. I have, indeed, operated successfully on a large intestinal exomphalos, containing several convolutions of small intestine, of a bright red colour, without any omentum. in a fat woman advanced in years; but the majority of cases, in which I have either operated myself, or seen the operation done by others, have ended fatally.

"Perhaps this fatality may be in some degree explained by considering that the exomphalos is most frequently in fat gross subjects, unfavourable for operations; that general intestinal disorder either exists with rupture, or is speedily produced by it; and that irritation and inflammation are readily propagated to the stomach, which is close to the umbilicus."

In the same work we find the following: "The great fatality of the ordinary operation for exomphalos makes it advisable that we should employ every precaution calculated to diminish subsequent irritation and inflammation. Hence it would be proper to adopt, especially if the tumour exceed a moderate size, the mode of operating which is applicable to large inguinal herniæ; in which the tendon is divided without opening the sack; or the latter part is only cut sufficiently to allow the division of the structure. This will permit the return of the parts if they are not adherent; and if adhesion should have formed, the immediate cause of danger, the strangulation is removed. The approximation of the sides of the wound by sutures, or adhesive plaster, will prevent the occurrence of inflammation in the tumour. The practicability of this mode of operating in umbilical ruptures is fully proved by two cases recorded in the work of Sir A. Cooper, and the successful termination of both instances proved the judgment and sagacity which had suggested that peculiar treatment."

From the concluding remark of the foregoing paragraph it will be perceived, that great credit is awarded Sir A. Cooper for his success in operating without dividing the peritoneal sack.

Too much importance is no doubt attributed to wounding the peritoneum, and this opinion is well established by the recorded cases in Churchill, of Cæsarean operations, in which mothers were saved. We must look to the anatomy of the umbilical ring for the true explanation of the fatality attending operations for exomphalos: and I think we will learn, that to be more successful, we should apply our different means for reduction in quick succession, so that failing in all but the knife, we may resort to it the sooner. If we introduce a finger into the umbilical ring, through which a protrusion which is reducible has taken place, we will at once be convinced from the firmness and unyielding nature of its walls, that a strangulation occurring at this point, would necessarily result in a disorganization of the tissues much more rapidly, than when it takes place at the internal inguinal ring, which is the mouth of a sac (the tunica vaginalis communis) continuous with the fascia transversalis, a thin elastic membrane, capable of considerable distension under any circumstances. Lawrence relates a case of a lady forty-eight years of age, terminating fatally in seventeen hours from the commencement of the strangulation.

Different methods have been given for the division of the stricture—such as dividing the linea alba downwards, to the extent of an inch; its division upwards has also been recommended, and Velpeau recommends, that several slight nicks be made at different points of the

ring. Dividing the ring downwards to the extent of an inch, would make so large an opening as to present an obstacle in the way of a radical cure. In the case related in the first part of this paper, the ring was divided about a quarter of an inch at the lower part, and this division not being sufficient, a mere nick at the upper part relieved the stricture. In cases where much cutting would be necessary to relieve the stricture, the plan proposed by Velpeau, enables us to relieve the stricture, without augmenting much the size of the ring, as effectually, as by a single long incision in any direction.

The only cases that I have been enabled to find recorded, in which this operation has been successfully performed, are two cases by Sir A. Cooper, one by Mr. Lawrence, one by Mr. Walker of Hurtsperpont, one by Velpeau. All the operations mentioned, were upon females. I have not been able to learn, whether the successful operation mentioned before, by Dr. Wistar, was upon a male or female.—*New Orleans Med. and Surg. Journ.*

Health of the Army on the Rio Grande.—We learn from Dr. Craig, chief Medical Director, who has been at Monterey ever since Gen. Taylor marched upon that place, that the general health of the army has greatly improved since cool weather set in; though many are still suffering from intermittent fever dysentery and diarrhœa. Dr. Craig says that the surgical operations performed at Monterey, for the most part, did very well. He performed one operation at the shoulder joint, on the field, which recovered. We should be much pleased if the surgeons on duty would keep us regularly advised of the health of the army.—*Ibid.*

Prodigious Fæcal Accumulations in the Rectum. By S. A. Cook, M. D.—On the 17th July, 1845, I was called to see F. C., a young lady aged about 15 years. Was informed that she had several times menstruated imperfectly, that she was somewhat troubled with costiveness, and that she had had no evacuation from the bowels during the three days last past. Tongue coated, white, not dry, skin hot and dry, pulse somewhat too frequent, and complained of pain in her head, with perfect loss of appetite. Prescription.—Directed her to take six grains of the following pill mass every six hours. ℞. Soc. aloes ʒiij.; g. scammony, ʒiss.; pulv. jalap, ʒiij. 1-4; hyd. protochlo., ʒi.; sapo. cast., gr. xv.; nit. pot., ʒss.; tart. ant. ʒj.; oil. anise. arab. muc., *aa* q. s. to make a mass.

July 18.—Being about ten miles distant, I received a very urgent call to visit her; found her in great pain, like the last pains of labour, the intermissions being very short, yet very perfect; urgent and painful desire to pass urine, yet none had passed since the morning before, (now 4 o'clock, P. M.) Cathartic pills have not operated, and was now informed that all the evacuations during the past two weeks had been but an occasional scanty discharge of mucus, and that such discharges were now being produced, the consequence of

the excessive tenesmus. Deciding to introduce a catheter I attempted to pass a finger into the vagina, but was prevented by what appeared to be an unyielding mass, filling the whole pelvis, and pressing upward and forward so as to make it very difficult to pass the finger between it and the pubes. I accordingly carefully insinuated the point of a silver catheter into the urethra and passed it into the bladder, and discharged a quart or more of urine. The tenesmus still continued, and the acuteness of the pain was somewhat relieved, but the involuntary straining effort which characterizes the closing throes of labor still continued. With considerable difficulty I now passed a large-sized gum elastic catheter into the rectum, and through a mass of fæcal matter, some ten inches, when adapting a syringe to the external end of the tube, I succeeded by dint of perseverance in forcing warm water through the plugged orifice of the upper end. After sending up about a quart of fluid, the catheter was withdrawn, and in two or three minutes more than a gallon of fæcal matter followed, consisting almost entirely of the seeds of raspberries. After another small evacuation, which followed in a few minutes, she became entirely comfortable. The next day I was again called, and finding much the same symptoms, resorted to the same means, and obtained a similar result. After this the urinary bladder and the rectum evacuated themselves without aid, and raspberry seeds continued to appear in the fæces for several days longer, though none had been eaten during the week previous to my first calling upon her. Since that time she has enjoyed her usual health.

I present this case to the notice of the profession, not on account of any peculiarity of the practice; indeed I think it was but what was indicated, and would have readily suggested itself to any reflecting physician; but 1st, To show that a vast amount of fæcal matter may accumulate in the rectum, and also above the sigmoid flexure of the colon, while the sensibility of the mucous membrane remains low as in cases of constipation, but that when this sensibility is increased, as it was in this case by the cathartic, violent symptoms are the consequence; and 2d, That when the pelvis becomes sufficiently full to distend the perineum, the action of those muscles associated in the function of expelling the contents of the pelvic viscera is excited, and if this distension be proportionally increased their action becomes intermittent and involuntary. This phenomenon we have all so frequently witnessed in parturition, when the head of the child fully occupies the pelvis and rests on the perineum, that we find it difficult to view it as but a specific accompaniment of that series of phenomena, the aggregate of which constitutes labour. Indeed so strong did this influence operate upon my mind, in this case, that when preparing to introduce the catheter, notwithstanding the youth of my patient, and the character of the family being above suspicion, I could not divest myself of the feeling that, upon the finger entering the vagina, the head of a fœtus would present itself.

Buskirk's Bridge, N. Y., Jan. 4th, 1847.

Boston Med. and Sur. Jour.

Letter from Persia.—Leeches in Intermittent Fever, &c.

We have just heard that the cholera has broken out in Teheran, the capital, though we have no definite information yet of the extent of its ravages. A physician residing in Tabreez, writes me, under date of August 1st, in the following manner: "We are all consternation here, at present, at the news of the cholera being at Teheran. The Prince (Governor of this part of Persia,) is most anxious to take all sanitary measures to prevent its arrival here, and has had communication with Dr. C. and myself on the subject, since which all the Rabab manufactories (cook-shops) have been sent outside of the town, and the selling of fruit diminished. Cleanliness is strictly enjoined, and a fresh supply of water let into the town from the gardens for watering the streets." The disease marched through these parts some twelve or fifteen years ago, and made dreadful havoc of human life. In many cases the natives, when attacked by it, used to throw themselves into a fountain or stream of cold water. The testimony is, as you would expect in such cases, that some lived and some died. By the way, what do you think of Andral's summary of the cholera? "Anatomical characters, insufficient; causes, mysterious; nature, hypothetical; symptoms, characteristic; diagnosis, easy; treatment, doubtful."

Are you familiar with the use of leeches, applied over the region of the spleen, in obstinate cases of intermittent fever? I have tried this treatment in two very bad cases, and with the most complete success. A Roman Catholic priest, a native of France, had been my patient some time, and I had become almost discouraged in using quinine and arsenic. He became worse and worse, and, dropsical symptoms supervening, his friends thought he would certainly die, and I began to think so too. In this state, I heard that Dr. Bell, Physician to the British Embassy at the Court of Persia, had used leeches in similar cases with great success, and I determined to try them on my patient. Dr. Bell's mode is to apply them on the day the moon fulls, and to repeat them every full moon until the disease is conquered. Though I had, of course, little confidence that the moon had any thing to do in the matter, I made the experiment exact to the letter, and at the first full moon applied twelve leeches over the spleen, intending to repeat the application at the next full moon in case the disease did not give way. But to my delight, and, I may add, surprise too, the poor priest, sallow and dropsical as he was, began to recover from that day, and I had no occasion to repeat the leeches.

I recently made a professional visit to Badr Rhem Bey, the celebrated Roordish chief of Buhtem on the river Tigris. His son, a youth of 12 or 14 years of age, had been suffering for about a year and a half from ague and fever of the *quartan* kind. He was reduced to a state which gave much uneasiness to his friends. At first I tried a purge and quinine, but without success. Indeed his next attack was more severe than before he had taken the medicine. I concluded to resort to the use of leeches, though some of his friends

thought he would certainly die, if he were to lose blood, pale and emaciated as he was. Without regarding the moon as in the former case, I applied six leeches the day before he expected a paroxysm, and on the morning of the next day, gave him two doses of quinine of four grains each. The disease was broken from that time. What comments have you to make on these cases?

Many, many thanks for your Journal. It is always *very* acceptable.

I remain, my dear sir, yours very truly,

A. H. WRIGHT.

Oroomiah, August 12, 1846. *Ibid.*

Royal College of Surgeons of England.—We cannot afford space for these regulations in full. They may be had at the booksellers, or in our number of last year, of which copies may be obtained at the office. From them it appears that a candidate for the *fellowship* must be twenty-five years of age; that he must have "a competent knowledge" of Greek, Latin, French, and the elements of mathematics. It does not, however, appear that what is called a "competent knowledge" of those matters is defined. He must have been engaged in professional study in schools or hospitals for six years, three of which, at least, must have been passed in *London*. He must have attended a surgical hospital for four years, and a medical one for one, and lectures on anatomy with dissections for three winter sessions; also, lectures on the practice of medicine, and clinical medicine, surgery, and clinical surgery, for two sessions, and on chemistry, materia medica, midwifery, medical jurisprudence, and comparative anatomy, for one session. He must also have served as house-surgeon or dresser in a recognized hospital. Bachelors of arts of "*English*" universities are admitted after five years' study, and are not examined in classics or mathematics. Those who were *members* of the college in September, 1844, are admitted to examination for fellowship when they are of eight years' standing, and those since admitted, or to be admitted members, are admitted to the same examination after twelve years' standing; but the latter must have graduated in an *English* university, or produce a certificate of "competent" classical knowledge. Candidates for the fellowship are examined on "anatomy, physiology, pathology, therapeutics, and surgery," only; and are required to perform dissections and operations on the dead body. It does not appear that they are examined on chemistry, the practice of medicine, materia medica, medical jurisprudence, comparative anatomy, or midwifery. They are, in fact, to be pure surgeons, and not general practitioners, and cannot claim to be appointed to mixed medical institutions, such as the Irish Infirmaries and dispensaries. They are to be what is called in England "pure" surgeons.

Candidates for the *membership* of the College of Surgeons of England are required to produce a certificate of being twenty-nine years of age, and having been engaged "in the acquirement of professional knowledge" for four years, and of having studied practical pharmacy for six months. The meaning of "acquirement of professional

knowledge" and "study of practical pharmacy" is not defined. Irish pupils going to London are said to take with them "a certificate" to that effect from any apothecary, which is procured for a trifling douceur. Candidates for the membership are required to attend an hospital for three years, nine months in each year. All the Dublin hospitals are recognized. Candidates are also required to attend lectures on anatomy and physiology, and demonstrations with dissections for three winter sessions, surgery for two, and the practice of physic, chemistry, materia medica, and midwifery, for one. Candidates for the membership are examined in *anatomy and surgery only.* In England the qualification to practice medicine and pharmacy is derived from the Apothecaries' Company, and no man is considered a general practitioner there, or eligible as medical attendant to mixed medical charities, unless he holds their license. The College of Surgeons in England, therefore, *does not examine in practice of medicine or pharmacy, or pretend to give any authority to practice either.* Neither do they require their members to learn or to answer in medical jurisprudence, considering that medical witnesses should have the full qualification of general practitioner. In fact, it appears that the college wish it to be understood that their members are qualified as mere or "pure" surgeons only, and leave them to obtain their qualifications to practice medicine from the medical colleges, and pharmacy at the apothecaries' halls.

With respect to certificates, the London College recognizes all schools and lectures without exception. They state, however, in the above regulations, that, in common with all the other colleges, they reject the certificates of persons who lecture on more than one branch, and therefore refuse the certificates of professors or lecturers who lecture on surgery as well as on anatomy and physiology, but they allow this rule to be evaded. Certificates are not recognized from Dublin, unless the name of the candidate who produces them shall have been returned to the college as having been in attendance on the 25th of November, the 10th of February, and the 10th of May; at which periods the professors, lecturers, and hospital surgeons, are required to return the names of the students then attending, *with the dates of entry*, and periods for which they have entered, "with remarks." "It is required that the dates of commencement and termination be clearly expressed." Students should henceforth be very careful not to rest satisfied with having their names entered into these returns, unless they are really in Dublin and actually "attending" the lectures and hospitals, because any falsehoods in the returns may subject them to the penal provisions of the charter. It is the person who holds, uses, or presents false certificates, who is to be punished, the person who signs and grants them is not held answerable.

There are various methods by which students whose other avocations or limited finances prevent them from complying with the printed regulations of this college can obtain an examination; and as the council appears disposed to afford gentlemen so circumstanced all reasonable facilities towards obtaining a diploma, they can scarcely

be blamed for availing themselves of them. An experienced private examiner can explain more to them respecting this matter than we care to mention.—*Dublin Medical Press.*

Progress of the Cholera.—We copy the following from the *Times* newspaper, and we do so at the risk of exciting perhaps unnecessary alarm. It is obvious that the medical profession should not be kept in the dark with respect to such a matter, if for no other reason, for this, that they should be prepared, not only to meet real danger, but to resist and expose any attempt to create premature or uncalled for apprehensions for placehunting or puffing purposes.

"We have received from our correspondent at Trebizonde a letter dated the 26th of September, from which, with deep regret, we make the following extract:—

"The cholera has passed the line of the Russian quarantine on the borders of the Caspian Sea, and is raging throughout all the Tartar villages of the district of Salgau and of Leukeran. A considerable number of Cossacks, from the *cordon* on the Persian frontier, have likewise been attacked. At Rescht, a Persian city in the province of Ghilan, the cholera is still making incessant ravages, which have now continued during two months. The sanatory state of all the towns to the west of the Caspian Sea, from Bakou to Astrachan, is very unfavorable. Dysenteries and diseases of the stomach (frequently mortal) prevail in those towns, particularly amongst the troops in the garrisons. These maladies are probably the forerunners of the real Asiatic cholera—a phenomenon rather curious, which has been again observed latterly in Persia. There prevailed at Teheran, at Astrabad, at Meschid, and at Ispahan, a malady a considerable time before the appearance of the cholera, of which the symptoms resembled the Indian disease. The caravans which arrived from Teheran eight months since spoke of the existence of the scourge which was mistaken for the cholera. A French physician, who resided at Teheran at that period, and who passed through our city a few days since, assured us it was the cholerine, such as had likewise been observed in several towns of Europe in 1833 and 1834* as a precursor of the cholera. The population of Teheran, which had been estimated at 80,000 is reduced by the ravages of the cholera to 60,000. The foreign ministers and their attendants had not dared to return to the city, but still continued to reside at Mount Alburs, in the neighborhood of Schemen, to the north of Teheran. The Russian authorities at Tiflis are well aware of the appearance of the cholera in that neighborhood, and the inhabitants of Tiflis have fled, but up to the 12th of September no official announcement had been made of the fact. Perhaps this course was pursued in order to prevent the merchants from becoming alarmed, and a consequent interruption of commercial affairs."—*Ibid.*

* This is a mistake. The cholera set in in Paris on the 28th of March, 1832.

Free trade in Medicine and Surgery.—The people called "statesmen" as a grove is called *lucus, a non lucendo*, have taken into their wise noddles the strange crotchet that every man, woman, and child in England, inherits and enjoys the unquestionable right to cripple, poison, mutilate, and slay all and every her Majesty's subjects, provided they consider that they can thereby put money in their purses, and all dyspeptic lawyers and constipated jurymen have evidently arrived at the same conclusion. Mr. Warburton, the great theoretical medical reformer, by his advocacy of cheap-doctoring and free trade in drugs, did much to perpetuate this delusion, and Sir James Graham by his abortive bill contributed to the same end. Every day's experience, however, proves that there must be an end to this nonsense. The recorded deaths from the mal-administration of drugs form a frightful catalogue of wanton outrages within the present year, and the evil every day increases. The following is another example of the toleration extended to the base and ignorant who have the temerity to trifle with life in this way. Judges, lawyers, and jurors have become so familiarized with such displays that they have now become subjects of jest, or occasions for cracking jokes on the doctors.—*Dublin Med. Press.*

"A report having been circulated that a man named William Myhill, a small farmer and carpenter, residing at Horsey, in the county of Norfolk, had died from the effects of some medicine which had been administered to him by his wife, Mr. Pilgrim, the county coroner, directed the body to be exhumed, and on the 24th of last month held an inquest at Catfield, where the body had been interred. Several witnesses were examined, but the chief evidence offered was that of the servantmaid, who, in a long statement, disposed to her mistress having obtained some medicine of a person living at Reepham, which she administered to the deceased just previous to his death, and then requested her (the servant,) not to say anything about it to any person, but to deny it if she was asked any questions on the subject. On Friday, October 2nd, the inquiry was resumed, when amongst other witnesses who were examined as to the wife having administered something to the deceased, was a Mr. Staples of Reepham, who calls himself a chemist and druggist. He deposed as follows:—

"I vend drugs and prepare them, but I do not profess to be a surgeon. Some short time since Mrs. Myhill, the wife of the deceased, came to me and stated that her husband was very bad. I prescribed for the deceased from the representation made to me by his wife. I cannot say what she stated. I made up some medicine according to the nature of the disease. I was not told what was the matter with him, but I found it out by my study, my science, and my search. I do not recollect that I ordered brandy and water, neither do I exactly recollect what I did prescribe. At the time I put it on a slate, but it was afterwards rubbed off. The medicine was to relieve the pain—it was not opening medicine. Mrs. Myhill was to have called upon me again, and let me know how her husband was, and to tell

me the effect the medicine had upon him. I am perfectly satisfied that the medicine I prescribed could not do him any harm, but I did intend that it should do him good. I considered that the deceased was in a very bad state, and that I ascertained from my research in science, and study from my books of knowledge. If a person came to me and represented their case, I should not be governed by what he said, but I should be governed by the rule of science and my books of knowledge. I could by searching those books ascertain more of their disease than any person could inform me. It is a very common practice with me to prescribe for persons I have never seen, nor yet had a description of their complaints. I neither want to know the name of the party, or where they come from, or any description whatever of their complaints, as I can always find every thing out by the rule of science, my study, and from my books of knowledge. If any person had come to me after the death of Myhill, I could have stated the cause of his death, but the time is now so far gone that I cannot. He again repeated his powers of discovering the complaints of persons by the aid of his books, which was the cause of much merriment to the coroner and the jury, who looked with some suspicion upon the many *cases* [cures?] he pretended to have effected by his books, his science, and his study.

After this evidence, which put a very different aspect upon the inquiry, the surgeons, who had analysed the stomach, said that they had not been able to detect the presence of any metallic or vegetable poison; and, from the appearance of the lungs, were of opinion that the deceased died from natural causes. The jury returned a verdict accordingly."—*Norwich Mercury.*

A New and Original Curiosity of Medical Literature.—Wonders will never cease. Who could have thought some time ago that a "celebrated obstetric physician" in the metropolis could treat a lady in the country by electrical telegraph, yet to that complexion has it come.—*Ibid.*

"*Consultation per Telegraph.*—The services of the electric telegraph between Norwich and Shoreditch were put into requisition on Thursday in a novel manner, being made the means of communication between a physician in London and his patient in the former place. On Wednesday Dr. L., *a celebrated obstetric physician*, was sent for from London to attend a lady, lying there in a dangerous state; on his return to town, he left instructions to the medical attendant to convey information of the state of the patient the next morning by means of the telegraph. This was promptly done on Thursday morning, and the prescription was as promptly returned. This it would appear, was repeated more than once, the services of the telegraph being continued for four hours. Unhappily the telegraph completed its communication by announcing the *death* of the lady." *Essex Herald.*

The Asiatic Cholera in Persia.—According to the Gazette Médicale, six Princes and several Princesses of the Court of Persia have been cut off by the Asiatic cholera. The mother of the Prince Royal, and the only daughter of the Schah, had been attacked, but had recovered under the treatment of Dr. Cloquet. Among the victims is the celebrated Mirza-Aboul-Assan-Khan, minister of foreign affairs, —who was ambassador to this country in the year 1820. Another minister of the Schah, the Visier of the Prince Royal, and other high functionaries of the Court, have also been cut off by cholera. The disease appears to have been particularly fatal among the upper classes. It was spreading in all directions, and had taken the course of Astrachan and Moscow. It was expected, however, that its progress would be arrested by the cold of winter.—*London Med. Gaz.*

On the Influence of Vaccination in Diminishing the Mortality from Small-Pox.—Much has recently been said respecting the frequency and fatality of small-pox, at the same time that doubts were often expressed as to the efficacy of vaccination in preventing that virulent disease. Should any person still entertain such opinions, his fears must be very considerably diminished by the facts stated at page 62 in the Seventh Report of the Registrar-General, just published. According to that official document, the number of deaths from small-pox, throughout England and Wales, during five consecutive years, were as follows:—In 1838, 16,268 persons died of that disease; in 1839, 9,131; in 1840, 10,434; in 1841, 6,368; and in 1842, only 2,715 deaths are reported.—*Ibid.*

Employment of Gun-Cotton in Cupping..—The Prov. Med. and Surg. Journal of Dec. 9th contains the following announcement:—"It may be useful to know the value of gun-cotton in exhausting the air from cupping glasses; having so employed it myself on several occasions, I can recommend it as possessing a decided superiority over spirit; besides, its lightness and portability is an advantage at times. A very small portion is placed within the glass, and before a piece of lighted paper can be well introduced, from its highly inflammable nature it becomes ignited, imparting to the surface enclosed merely an agreeable warmth."

THE

MEDICAL EXAMINER

AND

RECORD OF MEDICAL SCIENCE.

NEW SERIES.—No. XXVII.—MARCH, 1847.

ORIGINAL COMMUNICATIONS.

Statistics of Cases of Miasmatic Fever treated in 1846. By George L. Upshur, M. D., of Norfolk, Virginia.

During the past year, 105 cases of miasmatic fever came under my care. Of these, 83 were Intermittent, and 22 Remittent. Of the intermittent, 1 was quartan, 15 tertian, 62 quotidian, and 5 masked. Of the masked, one took the form of neuralgia, and four simulated hysteria.

The treatment chiefly employed was the sulphate of quinine, administered in large doses, without regard to the stage of the disease. In one case—a quotidian—occurring in a youth aged 16, of sanguineous, excitable temperament, I administered 15 grains just as the cold stage was passing off. All the symptoms were ameliorated; the hot stage lasted but one hour, and the patient had no return of the disease.

In 25 cases, I gave 30 grains in five hours, during the height of the febrile stage. The pulse was *lessened in force and frequency* in every instance under this treatment, and the paroxysm cut short by the speedy appearance of perspiration. In only one of these cases was the remedy preceded by other treatment. The exception was the case of an exceedingly robust man, in whom there existed, even in his ordinary health, a strong tendency of blood to the head. I bled him to twenty ounces before administering the quinine. He returned to his work (that of a baker,) forty-eight hours afterwards, and had no return of the fever

during the season. He told me that for several years past he had not escaped an attack of bilious fever in the autumn, and that he was usually kept in his bed by it for three weks. Said that he had taken the quinine before, but not while the "fever was on."

In one case, the patient was partially comatose during the first paroxysm. This condition was relieved, in a measure, by a cathartic of calomel and aloes. Three hours before the second chill was expected, I administered 25 grains of quinine, and followed this by 15 grains more two hours afterwards. The patient missed the paroxysm and went to work the next day.

In 14 cases there was a recurrence of the disease. The recurrence in ten of these, however, could be positively traced to a second exposure to the causes of the affection.

The masked forms of the disease yielded readily to the quinine treatment. One of the cases which simulated hysteria was remarkably severe in its character, the patient being seized every afternoon with violent convulsions, accompanied by flushed face and considerable excitement of the circulation. She was treated at first by active purgation, and vesicants to the nucha, with only slight abatement in the intensity of the paroxysm. The regularity with which the attacks came, coupled with the fact that the patient resided in a part of the city where intermittent fever was prevailing, suggested the employment of quinine. She commenced early in the morning with five grains every hour, and took thirty grains. The paroxysm was much milder in the evening, and did not recur at all on the next day. She remained well for seven days, when she was again attacked as in the first instance, and again relieved by the same treatment. She subsequently had a third attack which was cured in the same manner. Her catamenia had been interrupted for six months previous to her sickness, and did not return until six weeks after the last attack.

I was not called to a single case of remittent fever at the beginning of the disease. In one case the patient had been ill *eleven* days without any treatment whatever; she was much emaciated, and had suffered from diarrhœa for six days. I gave her a table-spoonful of the following mixture every hour:

℞. Quiniæ Sulph. ʒss.
Morph. Sulph. gr. ss.
Aquæ f. ʒiij.
M.

In the course of five or six hours she perspired freely, fell into a quiet sleep, and in two days after was entirely free from disease. This was the sole treatment of the case, except the tinct. chlorid. ferri, which was given for ten days after convalescence was established.

The other cases were managed after the same manner—the large doses of quinine being preceded by a simple cathartic of jalap and bitartrate of potassa, in those cases only where there was great torpor of the bowels.

Not one of the 105 cases died, and all together did not take a drachm of calomel, or other preparation of mercury.

I observed unpleasant symptoms in only three cases, where they seemed to be at all dependent upon the large doses of quinine.

1. A delicate, nervous female, aged 36, was ordered 5 grains every hour, for a second attack of quotidian intermittent. When she had taken 20 grains, she became suddenly nauseated and vomited up three mouthfuls of scarlet blood. This occurred in the morning, and the chill was expected late in the afternoon. The medicine was suspended immediately, and she missed the paroxysm, and recovered without any other untoward symptom. She was treated with quinine for the first attack and also for a third, without any such effect being produced. The hæmatemesis was not vicarious of the menstrual discharge, as the catamenia had not been interrupted.

2. In this case the quinine vomited the patient like full doses of tartar emetic. She took twenty grains in five grain doses in solution, combined with spt. æth. nit. There was no gastric derangement prior to the exhibition of the medicine.

3. In the third case the patient, a female aged 40, who had but recently recovered from a very severe attack of *lichen agrius*, was rendered deaf, or nearly so, for ten days, by taking forty grains of quinine in eight hours. The intermittent, a tertian, was permanently cured.

I was never deterred from giving the quinine by the existence of diarrhœa, irritability of the stomach, or headache, provided the case was urgent, and it was absolutely necessary to put an immediate stop to the paroxysms. In cases of great torpor of the bowels, if there was time to spare, I preferred to begin the treatment by purging freely, because the quinine is not readily absorbed if there is much constipation. Usually however the safer practice is to put an end to the paroxysms first, and afterwards attend to the local affections.

I have found great benefit from combining the sulphate of morphia with quinine, especially in those cases complicated with diarrhœa and irritable stomach. I also gave in many cases where the skin was very dry and the thirst urgent, the spt. æth. nit. combined with a solution of quinine, with great benefit.

My experience in the treatment of miasmatic fever in 1846, leads me to the following conclusions:

1. In a large majority of cases, no matter of what type the fever is, the "preparatory treatment," so called, is worse than useless, causing a loss of time which is often fatal to the patient.

2. A large dose of quinine, (15 or 20 grains,) administered at once, produces a more certain and permanent curative impression upon the system, than small doses (1 or 2 grains) frequently repeated.

Quinine in *large* doses, when administered in the hot stage, so far from exciting the circulation, acts as a decided sedative upon it—the pulse in every instance lessening in force and frequency under its influence. The dogma, therefore, that "quinine in fever is poison," must be discarded.

4. In *uncomplicated* miasmatic fever, mercurials are not at all essential to a complete and permanent cure. They may sometimes be given with advantage in cases where cathartics are indicated at the onset of the disease.

Norfolk, Va., February 6th, 1847.

On Polypus of the Rectum. By Robert Burns, M. D., Frankford, Pennsylvania.

To the Editor of the Medical Examiner.

Sir,—On perusing the January number of the Examiner, my attention was drawn particularly to an article among your medical records, upon *Polypus of the Rectum*, which recalled to my remembrance a case of this kind, which came under my care in the early part of the past summer; and should the following notice of the same be thought worth an insertion in your journal, it is at your disposal.

E. K. Y——s was from her birth what her mother termed a very troublesome child, being frequently indisposed. When about two and a half or three years old, her mother observed that she suffered much distress previous to the act of defecation, and before it could be accomplished, there was a protrusion of a dark red fleshy substance *ex ano*, which bled less or more on every occasion of the kind. This tumour was shortly associated with a second of smaller size, which, after remaining some months, separated from the larger one; this latter continued to enlarge, until, according to the mother's description, it had acquired the size of a small hen's egg. She states it was exceedingly troublesome, requiring to be replaced within the sphincter ani after every evacuation. This prolapse of the polypus always took place before the evacuation of the intestine, and never went up without mannal assistance. This state of things continued up to the age of five years, when I was consulted upon

the case. At this time the child was considerably reduced by sanguineous discharge. She had a distressed, anxious appearance, with great timidity resulting from the knowledge of her infirmity, and apparent consciousness that others knew it also. This rendered her an object of deep consideration and sympathy, apart from the usual and necessary interest which must be felt in every case of suffering humanity by the medical practitioner. The physical development of this child was naturally good, her eyes and skin dark, hair brown, and countenance open and intelligent.

On examination of the anus, I found a polypus protruding as large as a small seckel pear, being considerably diminished at the time from frequent bleedings. . On dilating the anus as much as possible, by traction in opposite directions, I found the pedicle to be somewhat elongated from the mucous membrane of the rectum above the sphincter; to this I immediately applied a ligature of silk thread, allowing the ends to remain long, which were secured externally by a strip of adhesive plaster; about twenty-four hours after its application the polypus separated, and two days after, the ligature came away. She suffered some pain while the ligature remained, which did not demand special attention. Since its removal, about eight months have passed away, and there has been no return of the disease; no hemorrhage, the function of the part is normal, and the child's health and appearance very much improved.

On Wounds from Fire-Arms without Ball. By Paul Swift, M. D., Philadelphia.

There is obviously a wide spread popular error in relation to the effect of the explosion of gunpowder without ball; and even professional writers on this subject are not very definite in regard to the distance at which a pistol, or other fire-arm, so loaded, may be discharged without inflicting a dangerous wound.

The popular notion and language is, that the piece is not loaded unless it be charged with ball, slug, or shot, as well as powder, and that its discharge is quite safe even when held near the person. Moreover, when wounds do occur from such discharges, all parties seem quite sure that the *wad* is the immediate cause. The following case will illustrate the prevalence of this opinion and its fallacy.

On last New Year's eve, at the Good Will Engine house, Wm. Simler, a minor, playfully, but heedlessly, fired a pistol charged with powder only, at his friend and companion Robert W. Pitt, inflicting a serious wound. Pitt, staggering into the

arms of his friends, cried out, "I am shot." Simler, thinking him frightened, but not harmed, said, laughing, "It was not loaded," or, as another witness testified, "It had no ball in it.' The wound was on the fleshy part of the left hip, above and behind the trochanter major, about one inch in diameter, and four inches in depth; the integuments were destroyed, and the muscles presented a blackened, mangled mass: it bled but little, and was carefully probed with the finger which readily passed to the bottom of the wound. No untoward symptom arose till the sixth day, when tetanus in its most distressing form, opisthotonos, supervened, and he died on the morning of the seventh.

On a careful post-mortem examination, no foreign substance was found but a minute fragment of woollen cloth, about two inches from the surface, and *grains of gunpowder, with which the wound, through its whole extent, was blackened.*

Thus it was evident that this fatal wound was caused by the explosion of gunpowder in a pistol of ordinary size; a wound at least four times as large as a ball from the same instrument would have caused; and so mangled were the tissues, through this great extent, that vitality was utterly destroyed. Had the unfortunate young man lived, it must have been through great suffering, necessarily attending the tedious and exhausting sloughing of the dead mass.

At the legal investigation which followed, there was some discrepancy in the testimony in regard to the distance at which the pistol was held when the wound was inflicted, the witnesses differing from one foot to two or three yards; nor is this very strange, as it occurred in the night, in a place not well lighted, and in the midst of a moving throng of some twenty individuals. The patient himself, however, declared his belief that the weapon "almost touched him." The pistol was said, by Simler, to have had a paper wad; but no wad was at any time found, and the evidence given at the time rendered it quite probable none was used.

Being one of the professional attendants in this case, I was somewhat surprised at the character and extent of the wound; it was obvious no ball could have produced it; nor was it conceivable that a paper wad could have caused such extensive lesions. A considerable research in works on medical jurisprudence failed to give satisfaction, and though the circumstances forced upon my mind the inference that a heavy charge of powder, exploded near the part, had alone caused the mischief, yet, as young Simler had been bound over for trial before a criminal court, it seemed very desirable to possess farther data in the premises. With this view I sought, and, through the courtesy of the officers of Jefferson Medical College, obtained the facilities for making the following experiments, which were used at the sub-

sequent trial, and are now offered to the public with a hope that they may be useful in future medico-legal investigations of this nature. The pistol—the same used by Simler—was wadded with paper, and has a bore about four inches in depth and six lines caliber.

Experiment 1st.—Pistol with an ordinary charge was held 12 inches from fleshy part of hip, the part being covered with one thickness of broadcloth and a twilled cotton cloth under it—Clothes lacerated, and skin abraded; wad on the floor, on fire.

Experiment 2d.—Distance 6 inches; parts covered as before, clothes lacerated; wad lodged one inch and a half below the surface.

Experiment 3d.—Distance 2 inches—wound ragged, blackened with powder, and penetrating to the bone—one and a half to two inches—wad was found immediately beneath the integuments, and somewhat *on one side of the principal wound*—parts covered as before.

Experiment 4th.—Distance one and a half inch from the *ribs* of the right side—no covering of cloth—penetrated the cavity of the chest, the wad passing through the intercostals between the ribs.

Experiment 5th.—Distance the same—no covering of cloth, the integuments removed—wad penetrated the thorax, *carrying away a transverse portion of the rib.*

The subject, about 35 years of age, a male, not recent, had undergone a preserving process with chloride of mercury, considerably hardening the muscles; it was also much emaciated.

BIBLIOGRAPHICAL NOTICES.

SYDENHAM SOCIETY'S WORKS:—*The works of William Hewson, F. R. S., edited with an Introduction and Notes,* by GEORGE GULLIVER, F. R. S., Surgeon in the Royal Regiment of Horse Guards. 8vo. pp. 360. London, 1846.

The works of Hewson, which form the first volume issued by the Sydenham Society for the year 1846, ought to be especially interesting to the American reader. Hewson himself died at the early age of 34, and his widow with her two sons and daughter,

were induced to come to this country on the recommendation of Dr. Franklin, between whom, Hewson and his wife, great intimacy existed. Hewson's Experimental Inquiries into the Lymphatic System, were indeed dedicated to Franklin, "by his much obliged and most obedient humble servant."

No one at all acquainted with the progress of physiology, especially as regards the blood and the lymphatics, is unaware of the merit of Hewson as a physiologist. Still, as Mr. Gulliver remarks, "his writings have been unjustly neglected," and are now so scarce that a complete copy of them is not to be found in the store of any London bookseller, nor even in some of the best libraries, as that of the British museum." Hence, the Sydenham Society have done well to make them a part of their publications, and every one will accord with the editor, that "they will be both an acceptable present to physiological literature, and a just tribute of respect to his memory."

Of the private life of Hewson but little, it seems, is known. He was born at Hexham, in Northumberland, England, on the 14th of November, O. S., 1739; where he received the rudiments of his education at the grammar school. His father was a surgeon-apothecary in the place, and much respected. With him young Hewson acquired his first medical knowledge; but being ambitious to augment it, he placed himself first under an eminent surgeon in Newcastle, Mr. Lambert, and afterwards resided for some time in London, Edinburgh, and Paris. In the autumn of 1759, he went to London, lodged with John Hunter, and attended the lectures of Dr. William Hunter. His diligence and skill soon recommended him to the favourable notice of the Hunters, and when John went abroad as surgeon with the army, early in 1761, he left to Hewson the charge of instructing the other pupils in the dissecting room. Hewson entered himself also as a pupil at Guy's and St. Thomas's Hospitals, and went to Edinburgh, where he studied until the winter of 1762, when he returned to London, entered into partnership with Dr. Hunter, gave some lectures, and had a share of the profits. In the summer of 1765, he went to France, but returned to London in time for the anatomical lectures. In 1768, on the sea coast of Sussex, he made sundry experiments on fish; and his papers on the lymphatic system of oviparous vertebrate animals were laid before

the Royal Society during the following winter, when he was made a fellow of the Society. To his recommendatory certificate were attached, amongst others, the names of Sir John Pringle, Dr. William Hunter, and Dr. Franklin.

In 1769, Dr. Hunter finished his well known building in Windmill street, where Hewson had a small apartment assigned him. They continued the lectures in partnership, dividing the profits equally—Hewson giving more of the lectures than he had formerly done. The Windmill street school is no longer in existence, but—as Mr. Gulliver remarks—"it will be preserved from oblivion by the names of the eminent men who lectured there. Among these the future historian of anatomy and physiology will have to commemorate William Hunter, Hewson, Cruikshank, Sheldon, Baillie, Brodie, Charles Bell." Mr. Gulliver might have added James Wilson—a man of decided, but modest merit, who was much respected by all who knew him, and whose name has been signalized in the "Muscle of Wilson."

In 1770, after his marriage, Hewson took a house near Dr. Hunter, in association with whom he continued to lecture during the winter of 1771. The connexion was soon after dissolved; and in 1772, Hewson began to lecture independently in Craven street, where he had built a theatre adjoining a house which he had destined for the future residence of his family. Before he began this course of anatomy, he gave a lecture on the uses of the spleen and thymus, to which he invited many men of science. His success in his first course of lectures was so great, that he had more than half the number of pupils that Dr. Hunter and he had conjointly.

Early in 1774, he had every reason to be satisfied with his position. "In viewing the situation of our associate at this period," says Dr. Lettsom—somewhat grandiloquently,—"the most gratifying prospects presented themselves, where genius and industry were rewarded with success, and domestic amities with felicity. The theatre in which he delivered his lectures and expounded his doctrines, was crowded with men of science, as well as with pupils, to listen to a youth grown sage by experimental researches." "In short," adds Mr. Gulliver, "Hewson was now surrounded by the blessings of life. He had a kind and just wife, who had borne him two lovely sons; his favorite sister lived with him; his success

in teaching was no longer doubtful, and his practice in surgery and midwifery had so much increased as to give him the fairest prospect of providing well for his family. But this happiness was soon to end. He was seized with a fever occasioned by a wound received in dissection, which proved fatal on May-day 1774, after a short illness, in the thirty-fifth year of his age."

His wife, whose maiden name was Mary Stevenson,—and who appears to have been a most exemplary woman,—had been upon terms of the warmest friendship with Dr. Franklin, from the age of eighteen. She was the daughter of a lady with whom the Doctor resided during the fifteen years he passed in London. Miss Stevenson lived mostly in the country with her aunt, Mrs. Tickell, and when Hewson proposed marriage to her, she consulted Franklin on the subject. The winter of 1783–84 she spent with Franklin at Passy. He had taken especial care in the direction of her studies, and some of his best letters on philosophical subjects were addressed to her. After she lost her mother in 1783, he frequently expressed a desire that she should become his neighbour in America; and in 1786, she proceeded with her children to Philadelphia, where she lived until 1792, and then returned to Bristol, Pennsylvania, where her eldest son William had established himself, and where "she closed a well spent life on the 14th of October, 1795." "Her second son, Thomas Tickell Hewson," adds Mr. Gulliver, "who was an eminent physician, and her daughter, Mrs. Caldwell, were both living at Philadelphia in 1837. Her son William died at Vera Cruz in 1832. In the hope that some further observations might be obtained from America concerning Mr. Hewson and his descendants, the printing of this sheet has been long delayed, but my inquiries have only elicited, that his son, Dr. Hewson, is at present the respected President of the College of Physicians at Philadelphia."

Mrs. Caldwell, we would inform Mr. Gulliver, is living; and we are happy to add that the surviving son of Hewson still pursues the career of an honorable, distinguished, but unobtrusive practitioner, esteemed by all who know him, and universally and justly regarded, from a long career of honorable service, as the patriarchial head of the profession in Philadelphia,—the worthy representative of the past and the present. Well does he merit the position of President of the College of Physicians, or of any

other body to which the suffrages of his medical brethren may call him!

The works of Hewson are in three parts. *Part first* treats of the properties of the blood. *Part second*, of the lymphatic system; and *Part third*, of the red particles of the blood; with some detached papers. It contains also eight copperplates, and an excellent engraved likeness of Hewson from a mezzotint in the possession of Mr. John Quekett, which is probably the same as that spoken of by Dr. Franklin, in a letter he wrote to Mrs. Hewson from Passy, in 1782:—"I forget whether I ever acknowledged the receipt of the prints of Mr. Hewson. I have one of them framed in my study. I think it very like."

The editor Mr. Gulliver, is well known for his translation of Gerber, and for his microscopical researches. He has attempted to place the matters to which his notes relate on a level with the present state of knowledge, and in this he has amply succeeded. Both in them, and in the introduction, the historical method has generally been kept in view, "because it is useful and pleasing, in a work of this nature, to mark the footsteps of the science and the names of its cultivators." The labour he has bestowed upon the subject has been great, and the results are most satisfactory. On the whole, the profession owe their thanks to the Sydenham Society for having placed in their possession—and in so beautiful a form — the works of one of the most distinguished of British physiologists.

The Principles and Practice of Ophthalmic Medicine and Surgery. By T. Wharton Jones, F. R. S., Lecturer on Anatomy, Physiology and Pathology at the Charing Cross Hospital, etc., etc. *With one hundred and two Illustrations.* Edited by Isaac Hays, M. D., Surgeon to Wills Hospital, etc. 8vo. pp. 509. Lea & Blanchard. Philadelphia, 1847.

The author of this work is well known to the profession by numerous and valuable contributions, which have appeared in the medical journals of the British Metropolis within the last few years, especially on Physiological and Pathological subjects. All his writings are distinguished by great precision and clear-

ness as well as terseness of style, and the production before us is well entitled to this praise.

"To produce a work on Diseases of the Eye," says the author in his preface, "which should serve at once as a text-book for students and as a book of reference for practitioners, has been the great aim of the author in composing this manual. Accordingly, besides carefully discussing the principles, he has laboured to give such a practical exposition of the subject as will be found available at the bedside of the patient, and in the operating room. At the same time, he has not neglected the opportunity which the subject offers, of illustrating the general doctrines of pathology, especially those of inflammation." The author furthermore mentions "that he has incorporated in the present volume the various contributions to ophthalmic medicine and surgery which he has made, some anonymously, in the course of the last fifteen years, and also that he has freely availed himself of the information contained in the principal works, British and foreign, on the subject."

On the subject of inflammation, affecting the various tissues of the eye, the author has treated at considerable length, and certainly with great clearness. As many of the most important diseases of this delicate organ consist either in inflammation or its consequences, and as all operations upon it must be regulated by the kind and degree of inflammation expected to follow, he justly regards an accurate knowledge of it as the master-key to the whole subject. This part of the work, therefore, is particularly rich and instructive for the young practitioner; indeed the work throughout is one of very great merit, and eminently worthy of the confidence of the profession. "The author having fully posted it up to the knowledge of the day, the Editor's task," to use his own language, "has been a light one. He has restricted himself merely to the narration of the results of his own experience in a few instances in which they differed from those of the author."

The pictorial illustrations are valuable, but we cannot say that the execution of all of them is equal to what we are accustomed to see from the press of the same eminent American publishing house.

Materia Medica and Therapeutics, including the Preparations of the Pharmacopœias of London, Edinburgh, Dublin, and [of the United States,] with many new medicines. By J. Forbes Royle, M. D., F. R. S., late of the Medical Staff of the Bengal Army, Member of the Medical and Chirurgical Society of London, of the Medical and Physical Society of Calcutta, and ,the Royal Medical Society of Edinburgh, &c., Professor of Materia Medica and Therapeutics, King's College, London. Edited by Joseph Carson, M. D., Professor of Materia Medica in the Philadelphia College of Pharmacy, Member of the American Philosophical Society, &c., &c., with ninety eight illustrations. 8vo. pp. 689. Philadelphia, 1847. Lea & Blanchard.

Of the various works that have from time to time appeared on materia medica on the plan of the one before us, there is none more deserving of commendation. From the examination which we have given, accuracy and perspicuity seem to characterize it throughout, and as a book of reference to the student of medicine, and especially of pharmacy in its applications to medicine, none could be better. But arranged as the lectures are in our medical schools, with sessions of a duration of not longer than four months each, it would manifestly be impossible for a professor on materia medica and therapeutics to embrace the relations which drugs bear to other subjects than medicine proper; and hence the best constant accompaniment to a course of lectures on materia medica and therapeutics in our schools is one that treats of the articles as medicines chiefly. In this relation we would not place Dr. Royle's work in the very first rank, to which position it is unquestionably entitled amongst treatises which are more adapted perhaps for the pharmaceutist than the physician.

From the station, which Dr. Royle occupied in the East India service, he was enabled to collect a vast amount of information in regard to the natural and commercial history of various drugs, on which but little precise knowledge was possessed previously; and every future work on materia medica and pharmacy—every new edition of dispensatories—must be esteemed imperfect, unless it shall have culled extensively from the valuable materials contained in his pages. Dr. Royle adopts the natural ar-

rangement, and treats, in succession, of the operations of pharmacy, pharmaceutical chemistry, mineral materia medica, vegetable materia medica, medicinal plants from ranunculaceæ to fungi; products of fermentation; animal materia medica from porifera to mammalia,—concluding with remarks on a physiological and therapeutical arrangement of the materia medica.

We think that every one who can afford it should possess this excellent work, the value of which has been greatly enhanced by the additions of Dr. Carson, than whom no one is more competent to estimate it correctly, and to make such additions as may adapt it for American service.

It is well "got up," and the wood cuts are better executed than in any work of the kind that has issued from the American press. The cause why certain plants have been selected rather than others is not apparent, but the author, we doubt not, could assign one that is satisfactory. Belladonna, Hyoscyamus and Stramonium, for example, have xylographic illlustrations, whilst Digitalis, Tabacum, Rheum, Camphora, and numerous others are neglected. The number of illustrations mentioned on the title page shows, indeed, that a large proportion of the plants must go unrepresented.

Lecture Introductory to the Course on the Theory and Practice of Medicine, in the Medical Department of Pennsylvania College. Session 1846–47. By William Darrach, M. D.

The excellent temper and good feeling exhibited in this lecture of the amiable Professor is in strong contrast with the ebullitions of spleen and mortified vanity, exhibited on like occasions by some grey-headed occupants of chairs in older and more pretending institutions. For the edification of such, we copy the opening paragraph.

"The topic, which I have been induced to select as an introductory lecture, is Life. Before I discuss it, permit me to tender you the usual, and, at the same time, most heart-felt welcome to all our Philadelphia Medical schools. Hitherto, we have been the youngest of them; and now there is yet a younger—the Franklin Medical College of Philadelphia. Prosperity to her laudable efforts! Long life to her! In her name and our own we welcome you. In that of our elder sister, the Jefferson Col-

lege, in her beautifully remodelled edifice; in that of the University of Pennsylvania, the venerable and beloved mother of us all; in the name also of the departed and never to be forgotten worthies, Rush, Wistar, Barton and Physick, patriarchs of American medicine—and higher yet, we welcome you in HIS Name, the Source of life, in whom we live."

Such sentiments disarm criticism, even when invited to the task by assailable doctrines and inconclusive reasoning.

THE MEDICAL EXAMINER.

PHILADELPHIA, MARCH, 1847.

LA LANCETTE CANADIENNE.

We have received the first and third numbers of a new Medical journal with this title, in the French language, published at Montreal (Canada) on the first and fifteenth of every month. The journal is edited and published by Dr. J. L. Leprohon, and from the ability displayed in the numbers before us, promises to be an able coadjutor in the good work of diffusing Medical knowledge. A considerable portion of the practitioners of Canada speak and write the French as their vernacular language, and to them such a publication must be particularly acceptable; and as many of the younger and more aspiring members of our profession in the United States pay more or less attention to it, they will find the perusal of such a journal to subserve the double purpose of furnishing them with much valuable information in the line of their profession, and of improving them in the knowledge of the language in which it is conveyed. We wish the enterprising editor a full realization of his warmest anticipations, whilst we promise ourselves the pleasure of occasionally gleaning from his labours for the benefit of our readers.

NATIONAL MEDICAL CONVENTION.

From all that we can discover, the Medical Convention to be held in this City in May next is likely to be the largest body of the kind ever assembled. Delegates have already been appointed by most of the Colleges and chartered Medical Societies throughout the Union,

and as the number of representatives from each body is determined by itself, without any suggestion or restriction emanating from any other quarter, many of them have chosen large delegations, especially the popular bodies. These latter, it seems to us, if the delegates vote per capita, will not only swallow up the schools, but, to use a bull, swallow themselves too—that is, the large number appointed by a few of them in the principal cities will out-vote all the rest. However, if wise counsels prevail so that they vote aright, and benefit accrues to the profession and the people, there will be none to complain.

The number appointed in this city, we believe, is as follows, viz:

By the Philadelphia Medical Society,		twelve.
"	College of Physicians,	twelve.
"	University of Pennsylvania,	three.
"	Jefferson Medical College,	three.
"	Pennsylvania College,	three.
"	Franklin College,	three.
"	Northern Medical Association,	five.
"	Philadelphia College of Medicine,	two—in all forty-three.

CATALOGUES OF MEDICAL SCHOOLS.

Last year we collected from the Catalogues and Medical Journals published in the different sections of the United States, the number of students and graduates of the season, and published the whole in tabular form, and we are desirous of doing the same the present year. To enable us to perform this task accurately, we respectfully request of the deans or secretaries of the different institutions to forward to us their respective Catalogues as soon as published. Thus far we have received but four, viz: those of the Jefferson Medical College of Philadelphia, the University of Pennsylvania, of the University of Louisville (formerly Medical Institute,) and the Memphis Medical College of Tennessee.

From these it appears that the class of the Jefferson Medical College during the past Session numbered	493
University of Pennsylvania	412
University of Louisville	348
Memphis Medical College	55

NORTHERN MEDICAL ASSOCIATION OF PHILADELPHIA.

In a former number we mentioned that the physicians residing in the northern part of Philadelphia, including Germantown and Frankford, were about to form themselves into a society for the promotion

of science and good-fellowship; since then, we understand that an association has been regularly organized under the title of "*The Northern Medical Association of Philadelphia,*" and that on the 14th of January last the following gentlemen were duly elected officers for the present year:

President—Dr. Benjamin S. Janney.
Vice-President—Dr. Arnold Naudain.
Counsellors—Drs. Uhler, Yardley and Hatfield.
Treasurer—Dr. M. B. Smith.
Secretary—Dr. Remington.
Reporting Secretaries—Drs. Townsend and Bryan.

The association has been judicious in the selection of gentlemen for its officers who are greatly respected in this community, and under such favourable auspices the best results must follow its organization.

RECORD OF MEDICAL SCIENCE.

Observations on the Employment of Compression in Aneurism. By O'Bryen Bellingham, M. D., F. R. C. S. I., one of the Medical Officers of St. Vincent's Hospital.

Mode in which Nature effects the cure of Aneurism.

When we consider how many writers have devoted their attention almost exclusively to the subject of aneurism, and how much talent has been engaged in illustrating its history, pathology, and treatment, it appears strange that the process which nature herself sets up for its cure should have been so much overlooked hitherto by surgeons; and although this process was daily, I may say, passing under their eyes, that the exact mode in which it was accomplished should have attracted but little attention, and no attempts should have been made to imitate or assist it.

In almost every case of aneurism where the disease has subsisted for some time, we find a larger or smaller amount of solid matter deposited in the sac, which is composed of the fibrine of the blood, arranged in regular concentric laminæ.

Examples of the spontaneous cure of aneurism, in which the sac is completely filled with fibrine deposited in regular concentric layers, are not very uncommon.

Again, in cases of valvular or other disease of the heart, when a considerable impediment exists to the circulation through its chambers, we know that the fibrine of the blood will separate from its other constituents, and form the bodies improperly termed polypi, (which are sometimes so closely interwoven with the carnæ columnæ and chordæ tendinæ as to be with difficulty detached,) which by closing the orifices, or obstructing the action of the valves, not unfrequently proves the immediate cause of death.

These familiar facts all tend to prove—

1st. That nature herself sets up a process by which, under favourable circumstances, the cure of aneurism is effected.

2d. That the mode in which she effects this, always in internal aneurism, and frequently in external aneurism, is by the deposition of the fibrine from the blood in the sac of the aneurism, until it becomes filled.

3d. That the fibrine in such cases is deposited in regular concentric laminæ, the oldest or first formed next the sac, those most recently formed nearest the centre.

4th. That a current of blood through the aneurismal sac is a necessary agent in bringing about this result.

5th. That any obstruction to the current by which its velocity and amount are diminished will accelerate the deposition of fibrine in the aneurismal sac.

6th. That once this process has commenced, if the same agents continue in operation, it will go on until the sac becomes filled, and no longer permits of the entrance of blood.

Writers upon aneurism hitherto appear to have been more intent upon solving unimportant points connected with the distinction between true and false aneurism; or in ingenious speculations as to the comparative frequency of aneurism from dilatation of all the coats of the artery, or from rupture of the internal and middle coats, than in investigating the mode in which a spontaneous cure of the disease takes place. Indeed so little notice is taken of this process in some modern works, that one would suppose the authors were either ignorant of the facts just stated, or looked upon the phenomena as too unimportant to dwell upon.

Before proceeding further, there is a point upon which I wish to make a few remarks. In the details of the cases of aneurism treated by compression which have been published within the last three years, the writers speak of the coagulation of the contents of an aneurismal sac, or of developing a coagulum in it by pressure upon the artery at the cardiac side, as if a coagulum or clot, and the concentric laminæ of fibrine which form in aneurisms, were identical: indeed, from the loose manner of expression adopted, it is sometimes difficult to tell whether the writers are aware of the distinction between them. This is the more remarkable, because the two substances in appearance, colour, and consistence, present a remarkable contrast; the one being soft and loose, of a very dark colour, not deposited in any regular order, and composed of the red globules and

fibrine of the blood; the other being solid and firm, of a paler colour, deposited in regular concentric laminæ, and composed of fibrine alone, or with a very small proportion of the red globules. The former is commonly found in the auricles of the heart, and in the large veins which open into them, and is familiar to every body; the latter constitutes the solid matter, which, in greater or less quantity, fills the sac of old aneurisms.

It is obvious, therefore, that the mode in which these two different deposits are formed cannot be the same. To cause the deposition of fibrine in an aneurismal sac, it is essential that a stream of blood should pass through it for a period that will vary according to different circumstances; but its deposition will be promoted or encouraged by diminishing the strength of the current in the artery leading to it, and by lessening the amount of blood which passes through the sac. This, it is easy to understand, can be readily accomplished by compressing the artery at the cardiac side of the aneurism, and the pressure need not be so strong as to occasion very great pain to the patient.

On the other hand, to bring about the coagulation of the contents of an aneurismal sac, the blood must remain at perfect rest for a considerable time; if a current continues to pass through the sac, the blood in it will be replaced by another portion before there is time for its coagulation; for although a coagulum or clot will quickly form when blood is removed from a vein, it is not so easy a matter to bring about its coagulation in an aneurismal sac in a living subject. To effect this, very considerable pressure would be necessary; the compression likewise, it appears to me, would require to be made upon both the cardiac and capillary side of the sac, and very near the latter; while the process will necessarily be so painful that few patients would be willing to submit to it.

It would appear then—

1st. That it is not by the formation of a coagulum in the aneurismal sac that nature effects the cure of the disease, but by the deposition of the fibrine from the blood which circulates through the sac.

2d. That simply diminishing the current will not cause the coagulation of the contents of an aneurism, but it will occasion the deposition of fibrine in the sac.

Proofs that Compression effects the cure of Aneurism in the same way as nature accomplishes this object.

The details of the cases previously given prove that pressure, so as completely to prevent the entrance of blood into an aneurismal sac (supposing that this could effect the coagulation of the blood, or that it could be borne by the patient,) is not necessary for the cure of aneurism; and all the facts connected with this method of treating aneurism go to prove that the consolidation of the tumour is brought about by the deposition of fibrine in the sac, not by the coagulation of the blood contained in it. Thus it has frequently been mentioned that at the commencement of the treatment, the aneurismal tumour

was soft and compressible, and collapsed on pressure on the artery leading to it; but after compression had been employed for a time, the sac became hard and incompressible, and did not collapse when the circulation through the artery leading to it was interrupted; proving that a deposition of fibrine had taken place, and that the process by which the sac was to be filled up had commenced.

In two cases recently published, an abstract of which has already been given, (one of which was treated by Mr. Porter, and the other by Mr. Cusack, and where the patients, curiously enough, were both medical men,) it has been mentioned that after pressure had been employed for a time, it became so irksome that the patients refused to continue it, they resumed their ordinary habits, and commenced taking exercise. At this period the sac in both cases is stated to have become hard and incompressible, yet the aneurisms ceased to pulsate, and a cure was effected, although pressure had not been used for some time; showing that the deposition of fibrine having commenced, went on, notwithstanding that compression was discontinued.

Again, I have given an account of the appearances found in the limb of a patient the subject of popliteal aneurism, who had been under treatment by compression for some time, but who died of erysipelas before the cessation of pulsation in the aneurism, and I have stated that "the aneurismal sac was in a great measure filled with firm layers of fibrine deposited in concentric laminæ," but that "no coagulum or clot was contained in the sac."

Lastly, the very fact of the irregular manner in which the compression has been maintained in many of the cases, having been often intermitted and resumed according to the sensibility or irritability of the patient, is an additional proof that it was by the deposition of fibrine in the sac, not by the formation of a coagulum, that the cure was ultimately accomplished.*

From what I have now said, it would appear that the mode in which pressure upon the artery at the cardiac side of the aneurism effects the consolidation of an aneurism, and that by which nature effects this object, are identical; in both cases the fibrine of the blood is

*I have often been compelled, much against my will, to digress, in order to correct the misrepresentations and errors contained in a "History of the Cure of Popliteal Aneurism by Compression," put forward in the shape of an "editorial article" by Mr. Wilde, in the *Dublin Quarterly Journal of Medicine* for August, 1846 (which has been also reprinted separately, and distributed extensively.) In noticing this curious production for I hope the last time, I shall merely observe, that his remarks upon the mode in which compression effects the cure of aneurism will be read with surprise by every one who has seen this method employed; and cannot fail of leading to the conclusion that the writer must be utterly ignorant respecting both its theory and practice. "It is quite apparent (he says, the italics are also his own,) that its [pressure] removal at *a particular time*, even for a few minutes, and allowing the flow of blood through the sac again to take place, will undo all that had been before effected!"—*Vide Dub. Quart. Jour. for Aug.* 1846, *p.* 131.

gradually deposited in the sac, which continues until the sac becomes filled, and no longer permits of the entrance of blood. I have next to show that the ulterior changes which take place are the same in both.

When the sac of an aneurism has been completely filled by fibrine, deposited as already mentioned, the disease is cured; it can neither increase in size, nor can rupture take place. If the aneurism was seated in the arch of the aorta, however, the calibre of the artery at the part from which it springs will still be preserved, and the circulation will continue through it as before, because the anastomosing branches are not sufficiently numerous or large here to carry on the circulation if this vessel was suddenly obliterated; while the current through it is necessarily too strong to permit of fibrine being deposited in its interior. Eventually, the sac diminishes in size from the gradual absorption of its contents, and ultimately it may in a great measure disappear.

When the sac of an external aneurism has become filled by fibrine, the disease is evidently also cured, and the circulation through the artery may continue for a time; but the anastomosing branches here being numerous and free, the blood passes down the main artery of the limb in a diminished stream, the deposition of fibrine therefore continues until the artery at the seat of the aneurism is encroached upon and gradually filled by fibrine, when its pulsation stops, and the deposition of fibrine ceases.

Once a certain amount of fibrine has been deposited in an aneurismal sac, as the result of pressure upon the artery above, there would appear to be an irresistible tendency to its continuing to be deposited until the artery at the part is likewise closed up; this fact has been proved by the two cases to which I have recently referred, where the patients refused to continue the pressure, and commenced taking exercise; yet under these apparently unfavourable circumstances, the pulsation ceased after a short interval, and a cure was effected. It is therefore not unlikely that the artery has many times been tied in aneurism, where the process which nature sets up for its cure had made considerable progress, and where a little further delay would probably have done away with the necessity for its performance.

The ultimate changes which take place when the pulsation of an external aneurism ceases, are the same, whether this result has occurred spontaneously or been brought about by compression. The circulation is carried on by the enlarged collateral vessels, the contents of the sac and the artery at the part from which it springs, are gradually removed by the absorbents, the sac disappears in a great measure, and the vessel is eventually converted into an impervious ligamentous band. Guattani Petit, besides many other writers, have reported cases of aneurism spontaneously cured, where this condition of the parts was found; and I have already described the appearance which I found in a case were the patient died two years and a half after the cure of a popliteal aneurism by compression, and sixteen months after the cure of a femoral aneurism in the opposite limb;

"the artery at the site of each anurismal sac was converted into a solid, thick, ligamentous band, its channel was obliterated, and the contents of the sacs had been removed by the absorbents."

The foregoing facts all go to prove, that when a cure of external aneurism takes place spontaneously, or when it is brought about by compression, it cannot fail of being permanent; the sac is filled up, and the artery from which it springs is obliterated; consequently, pulsation cannot return, nor can a secondary aneurism form at the part, both of which have occasionally occurred after an apparent cure by the ligature.

Proofs that the ligature at a distance from the sac effects the cure of aneurism in the same way as compression.

I have now given a sufficient number of proofs that the mode in which compression effects the cure of aneurism, is identical with that by which nature accomplishes this object. If it could now be shown that the ligature of the artery at a distance from the sac generally effects the cure of aneurism in the same way, it might help to remove the prejudiced view taken of compression by surgeons, who are either so wedded to the ligature that they distrust every other mode of treating aneurism; or who, through ignorance of the principles upon which it effects a cure, can see in it nothing but the revival of an obsolete and abandoned method. This I shall now endeavour to do.

Almost every writer upon aneurism mentions cases where the pulsation returned after the ligature had been used; or where hæmorrhage occurred from the sac subsequent to the operation. "It is not uncommon (Mr. Guthrie says) for a pulsation to be felt in the tumour a few hours, or in a day or two after the operation, but it very rarely continues." "A stream of blood (Mr. Hodgson observes) in most instances passes through the aneurism after the ligature of the superior part of the artery; yet this current is in most instances not sufficient, either by its quantity or by the force with which it is impelled, to continue the disease."

These facts show that the ligature of the artery at a distance from the aneurism does not always prevent a current of blood from passing through the sac, while pathology proves that inosculating branches not unfrequently communicate with the artery between the ligature and the sac; that the artery is always pervious here, and remains so after the cure of the aneurism; and that the sac has been found filled with fibrine deposited in concentric layers, where an opportunity has been afforded for examining the limb some time after the operation.

The theory laid down in modern works respecting the mode in which the ligature of the artery at a distance from the sac effects the cure of aneurism, is as follows:—When the ligature is tightened, the blood contained in the sac, or which may find its way into it afterwards, distends the sac, and extends into the artery above and below the opening by which it communicates with it; it coagulates, the fluid parts are absorbed, and the more solid, aided by the contraction of the sac, form a firm tumour. The coagulum is subsequently removed by the absorbents, and the vessel is obliterated at the seat of

the aneurism, and for a short distance above and below it. The sac gradually diminishes in size from the absorption of its contents, and ultimately disappears either wholly or partially.

The foregoing theory would be perfectly correct if the artery were always tied close to the aneurismal sac, or if the artery were always obliterated between the ligature and the sac. But as the ligature is applied at a distance from the sac, and as the vessel in nineteen cases out of twenty remains pervious afterwards for some space between the ligature and the sac, it is evident that the vessel here must have continued to convey blood after the operation, because otherwise its cavity would eventually have been obliterated. It is therefore probable that a feeble current of blood continues to pass through the sac after the operation, and that in a great majority of cases the cure is brought about by the deposition of fibrine in the sac, not by the coagulation of its contents. This is further confirmed by pathology; Mr. Hodgson says, "in the dissection of cases some time after the operation, it has been found that the cavity of the sac was filled with concentric layers of coagulum, similar to that which is met with in aneurisms undergoing spontaneous cure," which obviously could not have occurred unless a current of blood continued to pass through the sac after the operation.

The ligature of the artery at a distance from the sac cannot of course effect the cure of aneurism unless the sac itself becomes obliterated: now, it appears to me that if the theory usually laid down were correct—viz., that the blood contained in the sac, and that which finds its way into it subsequently, coagulates after the ligature is tightened, one of two results would follow the operation much more frequently—a secondary aneurism would form at the part: or suppuration of the sac would ensue.

A secondary aneurism, for instance, would be liable to form, if the sac was large, and its contents wholly fluid at the time of the operation. It is obvious that in such a case, when the fluid portion of the coagulum is absorbed, the sac must shrink considerably to form a solid tumour. Writers upon aneurism have, however, endowed aneurismal sacs with extraordinary elastic powers, in order to enable them to uphold this theory; but in all the cases which I have seen dissected, the sac had formed adhesions with the parts in its vicinity; and if it possessed elasticity (which, considering that it is composed of the cellular coat of the artery is rather doubtful,) this agent could not have come into operation; consequently if a large anastomosing branch eventually communicated with the artery between the ligature and the sac, the pulsation would return, and a secondary aneurism would form at the part. I have little doubt that in the cases which have been reported where this result followed the operation, it was owing to a coagulum only having formed in the sac; it evidently could not have occurred if the sac was filled by fibrine deposited in the way that had been mentioned.

That suppuration of the sac would be liable to ensue under such circumstances, is, I think, also evident. We have a large sac contain-

ing more or less coagulated blood, this after a time comes to act as a foreign body, inflammation followed by suppuration sets in, particularly if, as not unfrequently happens in hospital practice, the tumour is much or often handled. The history of operative surgery contains many cases where suppuration of the sac followed the operation; and what has now been said will explain why it should have occurred in some cases and not in others apparently similar. If the ligature is placed very close to the sac, and the current of blood is thus completely cut off from it, inflammation followed by suppuration is more liable to follow than where the vessel is tied at a distance from the sac; we have seen that in the latter case a feeble current continues to pass through the sac after the operation, the sac becomes eventually filled with fibrine, and inflammation is as unlikely to ensue as after the treatment by compression.

Writers upon aneurism are somewhat obscure as to the exact mode in which the *artery* at the seat of an aneurism is obliterated after the ligature. The examination of cases where the patient lived for a long time after the operation, proved that this did occur; and that the appearances found here on dissection were exactly similar to those observed after both a spontaneous cure and a cure by compression.

The explanation usually given is, that the coagulum extends from the sac into the artery above and below it, which prevents the entrance of blood; this after a time becomes absorbed, the artery at the part gradually contracts, and is eventually converted into a solid cord. But we have seen that the artery remains pervious for some distance between the point at which the ligature is applied and the sac, and that a current of blood probably continues to pass through it after the operation, which would necessarily interfere with the formation of a coagulum in the artery at this part. Others suppose that inflammation sets in here, which unites the opposite sides of the artery; but they do not give any reason why the adhesive inflammation should be so conveniently set up at this particular spot; besides, we know that the vessel is obliterated at the same place when a spontaneous cure occurs, or where this followed the employment of pressure, although no adhesive inflammation occurs in either of the latter cases. The explanation becomes easy, however, if we admit that a current of blood continues to pass through the sac after the operation; the obliteration of the artery will be effected exactly in the same way as occurs in cases of spontaneous cure, or where compression had been employed.

Every thing that has now been said makes it probable that the ligature of the artery at a distance from the sac, and compression of the vessel at the cardiac side, effect the cure of aneurism in the same way. It has already been shown that the mode in which nature brings about a spontaneous cure is precisely similar; which of itself is a strong argument in favour of its correctness. But there is another circumstance which tends still further to confirm it—viz., that several phenomena connected with the surgical treatment of aneurism which were hitherto obscure, and inexplicable upon the theory that the

coagulation of the contents of the sac always follows the operation by ligature, are readily explained according to this theory.

For instance, we have seen that a slight pulsation is not unfrequently felt in the sac subsequent to the operation. Now, this theory not only explains its cause, but it shows why it ceases after a short time, and why, instead of being an unfavourable sign, it should rather be regarded as a favourable one.

By this theory alone, we can account for the artery being obliterated after the ligature at a point from which the aneurism springs, while it remains pervious between the ligature and the sac.

Lastly, it enables us to explain why suppuration of the sac should occur after the operation in one case and not in others apparently similar; and how a secondary aneurism forms in certain cases a long time after the operation, while in general it must be a rare result of the ligature.

Spontaneous cure of external Aneurism.

Every writer upon aneurism mentions or refers to cases where an external aneurism ceased to pulsate some time after admission into hospital, although a bandage had been merely placed round the limb (with or without compress upon the tumour,) but without the slightest intention or expectation of producing any effect upon it. Such cases are comparatively rare, and hitherto have been looked upon as the result of some happy chance which might occur once or twice in a practitioner's life, but from which no deductions could be drawn. "Such instances of inexplicable recovery (a recent writer observes) are extremely rare, and as examples of singular good fortune, are rather to be hoped for than expected; neither can any principle of practice be established on them."

In Mr. Porter's excellent practical treatise on Aneurism, published a few years since, two cases of this kind, which occurred in the Meath Hospital, are shortly reported. "Some years since (he says) a man suffering from aneurism was admitted into the Meath Hospital. The tumour was situated low down in the popliteal space, and was large, being fully the size of a turkey's egg. The limb was semiflexed, and could not be extended; pain very considerable; tumour not compressible, at least pressure influenced its size but slightly; it was hard, and did not diminish in bulk when the femoral artery was compressed, which, however, stopped the pulsation. With a view to humour the patient, until he could be persuaded to submit to an operation which I conceived to be absolutely necessary, I rolled a large bandage round the entire limb, from the toes upwards. This, as the idea of treating the disease by compression had never been contemplated, was very loose; nor had I the least notion that the tumour could have been influenced by it, one way or another. But on my visit the next day the aneurism was gone. Within an hour after the application of the bandage, the patient experienced some pain in the tumour, which soon became excruciating, and continued during the entire night. In the morning the tumour no longer pulsated—it had become solid and firm, and eventually the disease was cured."

"On another occasion a man was admitted into the same hospital, under the care of Mr. M. Collis, with a popliteal aneurism, the history of which I do not recollect with very great accuracy, except that it was rather of large size, not compressible, and there seemed to be not much fluid blood in the sac. A bandage was applied to this in a similar manner to that in the former case; it caused immense pain, and on the following morning the pulsation in the tumour was no longer to be felt. It, however, reappeared after a little time, but so very indistinctly that it was a questionable matter whether the sensation was not communicated from the finger of the examiner, and not from the tumour. The application of the bandage was persevered in, and in the course of a very few days no doubt could be entertained of the cure."

In the second volume of the Dublin Medical Press, Dr. Brunker of Dundalk, has related a somewhat similar case. The patient, aged 32, was admitted into the Louth Infirmary in August, 1839. His occupation had been very laborious and the aneurism had been first observed fifteen months previously. "On examining the ham, the entire space was observed to be completely filled up by a pulsating tumour, beating synchronously with the heart, soft and compressible, but becoming distended on the removal of the pressure. Pressure being made on the femoral artery in the groin, the pulsation instantly ceased, and the size of the tumour was sensibly diminished. He was ordered to remain in bed, and was placed on low diet.

"Two days after admission, a piece of dry sponge was placed over the aneurism, and retained *in situ* by a roller rather loosely applied."

Five days subsequently, on the removal of the bandage and compress, the tumour was much diminished in size, and no pulsation whatever could be detected in it. The pressure was continued, and the patient was directed to remain in the recumbent posture. He left the infirmary a few days afterwards. He was seen about a fortnight subsequently, and the bandage and compress had been continued, and he had remained quiet. "On removing them (Dr. Brunker observes) I could scarcely discover any traces of the former tumour, and no pulsation whatever was to be felt. A very obscure pulsation was to be felt in the anterior tibial artery, which could not before be discovered on a very careful examination."

It appears to me that the cause of the cessation of pulsation in the cases of aneurism which have been detailed, and in other similar ones, instead of being obscure, is easily explicable upon the principles laid down in the preceding pages; and that their history tends still further to corroborate what I have already said respecting the mode in which compression effects the cure of aneurism.

Thus, in every case that has been reported, the disease was of long standing, and the tumour had attained a considerable size. In the majority of cases, likewise, it was hard and solid, and did not diminish in size when the artery above was compressed; proving that a deposit of fibrine had already taken place in the sac, and that nature had already made some progress in the process by which the cure

was ultimately to be accomplished. In fact, the condition of the parts was similar, in almost every respect, to that which we endeavour to bring about by the application of pressure; and which when it occurs, is the most satisfactory proof that the case is progressing towards a cure. In the third case which I have quoted, the tumour, though of long standing, is reported to have been "soft and compressible;" but it will be observed that pressure was maintained for five days before the aneurism ceased to pulsate, evidently a sufficient length of time for a deposit of fibrine to take place. Indeed in some of the cases of aneurism treated by compression, previously given, the pulsation ceased within a shorter period.

The mode in which the bandage and compress acted in effecting the cure of the aneurism in these cases appears to be similar to that in which nature in some rare instances, has effected this object—viz., the solid, or nearly solid sac was pressed against the artery from which it sprung, or against the orifice by which the sac communicated with the artery, in consequence of which the stream of blood which entered the sac was much diminished in amount and force, the disposition of fibrine then went on rapidly until the sac and artery at the part were obstructed; when, of course, the pulsation ceased.

Although "no principle of practice could be established" upon such cases, as long as the old theory respecting the cure of aneurism continued to be entertained, yet now that it has been proved that the cessation of pulsation in an aneurism is brought about by the deposition of fibrine in the sac, not by the coagulation of its contents, they afford us a useful practical hint in the application of pressure. For instance, after compression has been kept up for a time, if the sac becomes hard to the feel, and does not increase in size on the removal of the instrument, (although it still continues to pulsate,) we may then apply local pressure to the aneurism, by means of a compress upon the sac, with every prospect of effecting a cure more quickly than if we continued to make the pressure solely upon the artery above.—*Dub. Med. Press.*

SURGICAL SOCIETY OF IRELAND.

Foreign Bodies in the Eye. By Dr. Jacob.—Professor Jacob begged to bring under the notice of the society a small matter of which he had no written statement, but which he considered not destitute of pathological interest. The specimen he had to show was one of a foreign body projected into the eye, which he remarked was not unique, for some cases of the kind were on record. In breaking or dressing stones, it frequently happens to stone-cutters and others that a particle of the stone is driven with considerable force into the eye. This it was that happened in the case to which he was about to direct the attention of the society. A particle of stone had been so projected, and lay in the anterior chamber between the cornea and iris, but the interesting fact connected with this was that it should have remained in that situation for four years without having effected the

destruction of the organ. He had extracted it the other day, and had every hope that he would ultimately be able to save the eye. The lens is opaque, and the pupil eccentric, and it will probably be yet necessary to break up the lens more effectually than could have been done in the course of the operation of removing the foreign body. In cases of this kind, those men most often suffer who are employed in dressing mill-stones, cutting or breaking siliceous rocks; such accidents seldom occurring from cutting granite or lime-stone. The fragment in the present case was at least a fourth of an inch long and a sixth in diameter, and very sharp. Cases in which foreign bodies of this description had passed into the eye without destroying it, have (Professor Jacob observed) been recorded by Mackenzie, Lawrence, Wardrop, and others, so that, as he had before remarked, there was nothing very new in the case now before the society, but its pathological interest he considered of the first importance, showing as it does that when a foreign body of such a description finds its way into, and remains for such a lengthened period, in an organ of all others in the body so profusely supplied with nerves and vessels without causing its destruction, it need not to be considered necessary to search with such anxiety after foreign substances that find their way into other and so much less important parts of the body, under the apprehension that they will make their way eventually to the surface, instead of which they often remain at rest after a little time, if the part be kept quiet.

Another case had come under his care some years ago: it was that of a little boy into whose eye a portion of a copper gun-cap had passed through the pupil, and lodged in the crystalline lens itself, where it lay without producing any distress or mischief for two or three years. But the very curious fact connected with it was, that the copper never lost any of its metallic brilliancy, and never became even in the slightest degree corroded or oxidated. This case he temporized with, and the sequel proved very instructive; the lens became absorbed, and the bit of copper got entangled in the opaque capsule, and believing that it might not be possible to extract it, the patient being young and unmanageable, he still continued to temporize with the case, and lost sight of the boy for some time.

In about a year after, however, he again came under his notice, and now the copper cap had disappeared, and the anterior and posterior chambers were filled with blood, as if from some recent injury. The pupil was dilated, but the eye was spoiled. The cap being nowhere visible, it was probable that it had fallen to the bottom of the eye, so Professor Jacob considered it better to leave the eye alone, and the case was lost sight of. It is not alone in the anterior chamber, or in contact with the iris or crystalline lens, that bodies of this kind stick, but sometimes under the conjunctiva itself, though (Professor Jacob observed) from the toughness of the parts, it did not often happen; this, however, occurred in the case of a young lady, whose younger brother, in playing with a toy-gun, drove a portion of the cap into her eye, where it lay under the conjunctiva, its situation.

being indicated by a small blackish tumour underneath that membrane. Having felt the little body with the point of a needle, he was enabled to remove it with the scissors without difficulty. In this case the foreign body had lain for nine months without producing any material mischief. Many instances are recorded in which bits of straw, pieces of rush, twigs, and such matters, become impacted, and where (Professor Jacob observed) one would never suppose they could lie quietly for any time, and that not alone beneath the conjunctiva, but in the fold of reflection of this membrane to the upper lid. Here they sometimes lie without attracting any attention until the production of a fungous tumour over the foreign body brings the case under the notice of the practitioner. A gentleman presented himself under circumstances of this kind to him, and on attempting to remove the tumour with a fine pair of scissors, he found that he could not do so in consequence of some hard unyielding material, which he extracted after snipping off the tip, and which proved to be a portion of the flowering part of a rush half an inch long, which had probably been driven into the part some months before; the patient having had a fall from his horse in the field about that time.

Now, (Professor Jacob observed) the question suggests itself as to how cases of this kind are to be dealt with; should they be temporized with? This he considers we are perfectly justified in doing if the body has lain quietly for a considerable time, and more especially, if it be exceedingly small; but if the foreign body is the source of a certain amount of irritation, the distress experienced will of course compel the surgeon at once to remove it. In the case first alluded to, and a specimen of which had been sent round, there had been, as he had stated, a great deal of inflammation, followed by an eccentric pupil and opaque lens, yet no shrinking of the eyeball or other indication of destructive inflammation. With respect to the mode of procedure for the removal of foreign bodies in the interior of the eye, Professor Jacob would recommend the method pursued in the case of the fragment in the anterior chamber, so little effusion or distress had followed upon it. In such a case it is supposed that it is only necessary to make an incision in the cornea, and let the foreign body pass out as the lens would in extraction; the operation is, however, attended with greater difficulty than might at first sight be expected.

In the first place, if recently lodged in the eye, a good deal of difficulty attends its extraction. It is stated by Lawrence, Tyrrel, and others—though he (Professor Jacob) was not satisfied of the fact—that these bodies become adherent, that they become imbedded or enveloped in lymph. This, to be sure, one might expect, arguing from what occurs in other parts of the body under similar circumstances, but such was not the result of his experience; for instance, in the case under consideration, the particle of stone was perfectly clean and as distinctly visible in the anterior chamber, as if placed for examination in a drop of water. There was positively no lymphy coating either on the stone or in the case of the copper-cap; indeed, he could not clearly see where the lymph was to come from; if

lymph were shed, it would of course be the result of inflammatory action, and the foreign body would become adherent in consequence.

He would not, as he had said, deny that such might have occurred in other hands, but it was not so with him, and perhaps the statement was made by others under the conviction that a foreign body could scarcely remain in such a situation without becoming encysted. At the same time in the operation of extracting such substances it is well to be aware that they may be and probably often are adherent. In proceeding to extract them, as a general rule he would say, that the incision should be as large as possible, for the difference of mischief to the eye, between a small and large incision, is as nothing compared with the difficulty of dragging the foreign body through a small orifice. This will more particularly be necessary if the foreign body be a stone, as happened in the case now described, in which it was only after a second or third trial that Professor Jacob was enabled to extract it. Having waited between each attempt at extraction for the patient to become composed, and the spasmodic action of the muscles to subside, he was at length enabled to remove the fragment with the aid of the curette, and not without a good deal of force employed in disentangling it, for the little body was no doubt adherent, though not at all imbedded or encysted. Notwithstanding a good deal of violence having necessarily been employed, the case is going on well, there being no inflammation, such as would lead to the destruction of the organ. The man has already so much vision as to satisfy Professor Jacob that ultimately the eye will enjoy a useful amount of it. At the stage of his remarks, Professor Jacob said, it became a question for consideration whether in cases of this kind seen immediately after the accident, the practitioner would proceed at once to the removal of the foreign body. By all means, he would say, if he sees the case in the course of the day upon which the mischief has been done, it ought, if possible, to be removed at once, and this may sometimes be effected with the greatest facility, while in other cases the greatest difficulty is encountered. Thus it will happen that to remove a body lying in the anterior chamber there is nothing to be done but to pass the knife, cut through the edge of the cornea, and the foreign body immediately drops out; but in other instances, in spite of the utmost caution, it falls backwards into a fold of the iris, and entirely disappears from view; following it, however, with the curette, the extraction may be effected, notwithstanding that the lids are squeezed up, and every effort made by the patient to turn the eye away from the operator. In this college, many years ago, (Professor Jacob said) a case of this kind occurred in a pupil of the institution, who, while at work in the laboratory, had a splinter of glass driven into his eye from the bursting of a glass vessel. The particle passed through the cornea, and on seeing him immediately after, Professor Jacob observed the bit of glass lying in the anterior chamber, with one point resting against the cornea, and the other against the iris. Having made a considerable opening with the extracting knife, the foreign body almost disappeared at first, having fallen into the fold of

the iris, but with the curette he was fortunately enabled to lift it up, and the extraction was made without any subsequent injury to the organ. This case occurred in a gentleman who is at present a fellow of the college.

Professor Jacob next alluded to the minute foreign bodies which so frequently become fixed in the cornea, and which cause so much trouble to the practitioner in this country, where stone-cutting, quarrying, and stone-breaking is so common; and when, as elsewhere, so many working at the anvil, bench, and lathe, are liable to such accidents.

The foreign bodies in these cases (Professor Jacob observed) are either particles of the steel of the instruments used by the workmen, or portions of the stone itself, but in nine cases out of ten they are particles of the steel, and it becomes of importance to ascertain in what state the steel is at the time. As regards the difficulty of removal, a great deal depends on the size of the particle, which is sometimes wonderfully minute, so much so as to become scarcely visible after a great deal of trouble and minute examination, and occasionally only with the assistance of a lens of two and a half inch focus, after twisting and turning the eye up and down, in and out, in all directions. Yet so small a particle will be productive of the greatest mischief. In general those particles may be removed with great ease, requiring only to be touched with the point of a blunt instrument very cautiously, such as the handle of a camel-hair pencil, pared down very fine, or the convex part of his own cataract needle. If only adherent to the conjunctival layer, the particle slips off by the gentlest means, and if that does not succeed, or if the foreign body is more deeply imbedded, if it has got into the structure of the cornea, its removal is more difficult. If the foreign body has been projected with violence, and has become imbedded in the cornea itself, it must be lifted out of it. The point of the needle should be held within a very short distance of the foreign body before it touches the cornea, waiting quietly until the eye becomes steady; it should then be struck in beneath it, and the particle dug up, if not detached, by gentler means. The operator should never give up until he has fairly lifted it from its situation. Many surgeons at the other side of the water—among whom is so high an authority as Mr. Lawrence—recommend such cases to be left to nature, saying that a little spot of ulceration is formed round the foreign body which thus becomes washed away by the secretion of the tears; but this ulcer will ultimately leave behind it an opacity. As regards those cases in which small particles of steel have been projected into the cornea, and the particles so dissolved away that only a small portion of the oxide adheres to a speck of ulceration, this is to be removed with a few touches of the point of the needle, so as to prevent the occurrence of any permanent opacity. But of all circumstances connected with this subject (Professor Jacob observed) that which is of paramount importance to the practitioner refers to the condition of his patient's general health at the time of the accident. In this country these ac-

cidents to the eye are in themselves generally trivial, but the worst results sometimes occur to the subjects of them from an unhealthy state of the constitution. He had known total blindness to occur in stone-breakers from this cause much oftener than would be believed. Even when the foreign body is got rid of a destructive inflammatory process is set up under these circumstances which ends in the loss of the eye. A whitish sloughy ulceration takes place in the injured part, purulent matter is deposited in the anterior chamber, and at last the sloughy ulceration extends through the cornea.

To prevent or remedy this, attention must be paid to the state of the digestive organs and health in general. A yellow coated tongue is a sure indication of that state of constitution in general, and gastric organs in particular, which leads almost with certainty to this state of things, and this must be remedied by the usual medicinal and dietetic remedies, recollecting that such cases seldom bear or require depletion.

The learned professor concluded by apologizing for the length of time that he had occupied the attention of the society. He would, he said, not have gone so much in detail upon the subject, but that there are so many practical points connected with it, not always to be found in books, and upon which he had hopes of eliciting observations from the gentlemen present, which would throw additional light on the subject.

Mr. M'Coy mentioned the case of a young female who had come under his care for a painful abscess of the lower jaw. While examining her face he observed a bright silver-like looking body adhering to the iris. Her mother stated her age to be eighteen, and that the speck alluded to had always been in the eye, at least since she was a child; on further inquiry, however, it appeared that many years ago, while playing tricks on Hallow Eve, a particle of melted lead had flown into the eye, which latter became closed for two or three days, but no further inconvenience resulted from the accident. There remained no trace of wound or injury of the cornea, nothing but the brilliant little body just described, whose measurement was about a line in one way and half a line in the other. The circumstance (Mr. McCoy observed) appeared remarkable in two points of view—first, that the substance at the moment of its penetrating the cornea must have been very hot, yet upon examination there was not the slightest trace of lymphy exudation into the corneal structure; secondly, the body having for such a length of time retained its brilliancy.

Professor Jacob.—What Mr. M'Coy has just stated, one would at first sight say was a very improbable occurrence—namely, the projection of a particle of lead into the eye without producing great destruction. Again, the great improbability of a particle of such a body as lead being projected with such a degree of violence as to penetrate the cornea, and be deposited in the anterior chamber. Yet he was inclined entirely to agree with Mr. M'Coy as to the facts of the case. Particles of melted lead thrown upon water are sometimes cast up with great force, and he had known instances in which children have

had particles of melted lead thrown into the eye and retained beneath the lid, while persons were unaware of their presence there. In one such case, were a good deal of distress and mischief had been produced, he had removed after some weeks a portion of lead which had evidently found its way under the lid in a melted condition.

Dr. Hargrave wished, while engaged on this subject, to ask Professor Jacob what means he was in the habit of using for examining the fold of conjunctiva lying between the globe of the eye and upper lid. He recollected the case of a young man in respectable life who had been treated very actively for acute inflammation of the eye, and who maintained himself that a particle of the bearded portion of barley had got into his eye, but on the most careful examination nothing of the kind could be detected. On seeing him some time after, there was still a good deal of distress, accompanied by symptoms resembling chronic inflammation, and the patient still insisted on the presence of the foreign body. Dr. Hargrave could scarcely credit this statement, knowing how accurately he had searched for it before, yet upon again examining closely, a bit of the bearded barley, half an inch in length, was found completely impacted in the fold of conjunctiva just alluded to. The great difficulty of examination in these cases arises from the spasmodic action of the orbicularis muscle, which was found to be equally uncontrollable either in the very young, the middle aged, or the old. He would beg to express his admiration of the truly practical and valuable remarks of Professor Jacob on the subject under discussion.

Professor Jacob said the suggestion made by Dr. Hargrave respecting the impaction of foreign bodies and the difficulty of their removal from the situation indicated, was a very important one. Examples of the kind are recorded by Scarpa, Monteith, &c., and a case is mentioned by Mackenzie in which a portion of straw had become impacted in the sulcus alluded to. By the same author the case of a child is mentioned in whose eye a common fly had got entangled, followed by a great deal of mischief. He would say that the most feasible way to remove such would be to carry the curette slowly round between the eyeball and orbit. In such a case he thought it would be better not to evert the lid. By a little nice and dexterous management on the part of the surgeon, he was of opinion that even the smallest specks could be detected and removed.

Dr. Bigger suggested a mode of removing foreign bodies (not impacted) in this situation. The method is one proposed by an authority who has written on this subject, and by whom it had been successfully applied on many occasions. It is simply this: on raising the upper lid which conceals the foreign body, the struggles of the patient cause the lashes of the lower lid to approximate the globe, and the foreign body falling down becomes entangled in them, and thus carried out of the eye. Dr. Bigger had frequently tried this method with success in children, but of course if the body be impacted, additional means of extraction will be found necessary.

Professor Apjohn observed in reference to one particular point alluded to in the discussion of this very practical subject—viz., the preservation of their natural brilliancy by the little metallic bodies projected into the eye in those cases, that the explanation appeared to him to be as follows. The liquid in which the foreign body is immersed is totally devoid of free oxygen—it is, in fact, alkaline. Thus the body lying in a fluid which, unlike common water, contains neither air nor oxygen in a gaseous condition, maintains its characteristic lustre. If a piece of metal were placed in a vessel hermetically sealed, so as entirely to expel the air, its brilliancy might be preserved for any length of time, and the bit of metal in the cases alluded to might be looked on as placed very much in that predicament.

The Vice President expressed his admiration of the very valuable communication made by Professor Jacob; the observations which fell from that gentleman were, he said, ten times the more valuable because they were of such a nature as cannot be conveyed in books. He (Mr. Cusack) felt desirous to know Professor Jacob's opinion upon the difference in the state of oxydation of these metallic particles as seated in the interior of the eye or only under the conjunctiva; for it appeared to him that in the latter case the thinness of the mucous membrane rendered it perhaps not altogether impermeable to atmospheric air. For instance, many years ago it had happened to him in the case of a person admitted to the hospital for chronic inflammation of the eye, when turning up the lid for the purpose of examination, to observe something black in the corner of the eye. Examination with a probe proved it to be a metallic substance, and it appeared to Mr. Cusack, when pressed on, to be lodged in the substance of the eye itself. The history was as follows:—The man had some time before had, in a scuffle, a fork thrown at him, which consisted of but one prong. This it appears having passed through the eye, was broken off, leaving the small portion, which was now visible, projecting at the inner canthus and edge of the upper lid. It was difficult (Mr. Cusack remarked) to conceive how the fork should have taken such a direction, unless we suppose the person hit to have been placed in a position above that of the aggressor, and it is with this supposition only that we can account for the orbital plate of the frontal bone having escaped penetration under the circumstances. Another circumstance in Professor Jacob's remarks must (Mr. Cusack observed) have struck the students amongst the audience as a very peculiar feature in connection with this subject—namely, the intense sensibility of the conjunctival membrane and the acute attacks of inflammation it undergoes from comparatively trivial causes, while the eye itself can be subjected to so much violence. As an example of this intense degree of sensibility on the part of the conjunctiva, Mr. Cusack mentioned the case of a gentleman of rank into whose eye a fly had passed, and got impacted under the conjunctiva; this was a source of suffering for a length of time until discovered by a practitioner of acute observation.—*Dublin Medical Press.*

PATHOLOGICAL SOCIETY OF LONDON.

Mr. Ebenezer Smith exhibited a fœtal heart, presenting *Premature Occlusion of the Foramen Ovale; diseased Mitral Valve; contracted left Heart; large Pulmonary Artery and Duct.*

The preparation was accompanied with diagrams. The following is the history connected with the case:—

A small infant, the seventh of healthy children by the same parents, was born on Oct. 20th, 1846. His mother had noticed unnatural quietude during the last three months of gestation. Its birth was natural, the head, body, and limbs, well developed, and of the usual colour, till, in about five minutes after it first breathed, its face became dark blue, and the respiration difficult. The ligature on the umbilical cord was untied, but no blood flowed; the skin soon became similarly blue; and the respiration very difficult and irregular; the heart beat about 130 in a minute, clearly and strongly; the temperature appeared natural. In eight or ten hours apoplexy came on, the cyanosis being universal, the right arm paralyzed, and the left convulsively contracted. In sixteen hours the child was perfectly comatose, and it died twenty-one hours after birth.

Inspection, twenty-four hours after death.—The body full grown, well proportioned; skin marbled with large dark and white patches; pericardium contained two or three drachms of serum; the lungs about the usual size, full of dark blood, slightly emphysematous anteriorly; the liver apparently healthy; umbilical vein pervious and empty; venæ cavæ capacious; heart rather more vertical than natural, smaller and narrower in consequence of flatness of the left ventricle; both venæ cavæ, the right heart, and coronary veins, engorged. On the opening of the right auricle, which was distended, and of the usual form, the fossa ovali was seen in its natural position, but closed by a strong reticulated membrane firmly attached to its distinct annulus, impervious and pouched. A probe could be passed down to the left three lines into a considerable impervious inter-auricular fossa. Below the fossa ovalis, a mere vestige of the Eustachian valve; valves of the coronary vein distinct; the right auriculo-ventricular opening large, patent, and furnished with a very good valve, differing in form from the usual shape of the tricuspid, but with distinct, fixed and distended columns and curtains, and moderator bands, as demonstrated by Mr. Wilkinson King; walls of the right ventricle rather hypertrophied, the cavity being large, and not only descending to the apex, but curving round the left ventricle, so as alone to form the apex of the heart: no inter-ventricular communication whatever. The pulmonary artery very large, and three and a half lines wide at its origin; a little above its origin, more than four lines; its valves being perfect; it gave off, in the usual situation, branches to the right and left lung, and was then continued perpendicularly upwards, in a scarcely diminished trunk, the ductus arteriosus to the under surface of the aortic arch, nearly opposite the left subclavian, so that the blood from it would flow, not only into the descending aorta, but upwards, and somewhat contrary to its previous direction,

into the arteries of the head and arms. The four pulmonary veins entered the left auricle, as usual. This cavity was well developed, being wide transversely, and constricted vertically, having a very large muscular appendage. The complete membrane covering the fossa ovalis was here also quite distinct and impervious, and could be readily pushed towards the right auricle; the auriculo-ventricular opening extremely contracted, being but one line and a half in diameter. The mitral valve was altogether defective in structure, and seemed to have been faulty in action; it consisted of two very small, whitish, tendinous bands, fixed, the one to the septum, in front, the other to the posterior wall of the ventricle, without any curtains or fleshy bands, which, it seemed, could not have been opposed so as to prevent the reflux of the blood into the auricle. The left ventricle almost obliterated; its walls contracted on a small cavity at the base, not exceeding two or three lines in diameter, lined by a very dense, smooth membrane. The aortic opening also much contracted, being about two lines wide; the sigmoid valves perfect; the aorta itself normal in its course, giving off normal branches, but the ascending and transverse portion of the arch considerably smaller than the pulmonary artery, measuring, at its origin, three lines in diameter, and opposite the left carotid, just before receiving the arterial duct, two plies and a quarter; the descending aorta, after receiving the arterial duct, measuring two lines and three-quarters. The arterial duct continued almost perpendicularly upwards into a large trunk, to nearly opposite the left subclavian.

Thus, during the life of the child "in utero," the systemic circulation was maintained by the increased development and perfect mechanism of the right heart and vessels, notwithstanding the useless mitral valve, the arrested development of the left heart and aorta, and the strongly closed foramen ovale. On the assumption, however, by the lungs, of their proper action, the quantity of blood received by them was obstructed in its return by the defective mitral valve, &c., respiration became embarrassed, the free circulation of blood in the brain impeded, and death from apoplexy resulted. Mr. Smith remarked that two points of especial interest arose out of this example of malformation of the heart. The first was,—Which was the primary cause? Did the premature closure of the foramen ovale increase the activity of the right heart and vessels so as to carry on the circulation of the system, and arrest the development of the left heart, and particularly the mitral valve? Or, was the diseased action first manifested in the mitral valve, which, producing an utterly defective valvular structure, stayed the blood in its course through the left heart, and presuming the valve of Botal to be early and well developed, thereby pressed that valve against its margin, so as to cause its firm occlusion?

Judging from what appeared to be merely the vertigiform structure of the mitral valve, and from indications that the left auricle had once been more capacious, and had subsequently become constricted, Mr. Smith inferred that about the fifth month the mitral valve became

inadequate to the systemic heart of the growing fœtus, obstruction and embarrassment followed, so as to produce astasis of blood in the left cavities; increased energy, perhaps inflammation, of these structures ensued, which resulted in a closure of the foramen ovale. The ductus arteriosus being open, the energies of the right heart produced so perfect a development of its parts and connected vessels, as to maintain the systemic circulation; and hence, the left heart and ascending aorta being comparatively useless, contracted in their size. This view of the state of the left heart, exclusive, however, of the condition of the mitral valve, he thought was consistent with the other theory,—that premature closure of the foramen ovale was the first link in the chain of morbid occurrences.

The second point, as urged by Dr. Norman Chevers, "That a closed foramen ovale is not a proof in jurisprudence that a child has lived;" for in this case the occlusion must have existed long before birth. The preparation is deposited in the museum of Guy's Hospital.

Dr. Peacock exhibited three specimens of *Malformation of the Heart.*

In the first case, there existed extreme contraction of the orifice of the pulmonary artery, with a deficiency in the interventricular septum, and the aorta arose in chief part from the right ventricle. The right auricle and ventricle were of large size, and the walls of the latter thick and very firm. The left ventricle was, on the contrary, small, and its walls thin and flaccid. The left auricle was also small. The foramen ovale and ductus arteriosus were both closed. The heart was taken from a child two years and five months old, who had exhibited well marked symptoms of cyanosis, which commenced three months after birth. Dr. Peacock remarked that though the cases are numerous in which, with more or less contraction of the orifice of the pulmonary artery, the septum of the ventricles was deficient, it is far from frequent to meet with these malformations, with, as in this case, a closed state of the foramen ovale; and especially so when there is great contraction of the pulmonary artery.

The second case was one in which the only departure from healthy conformation of the heart consisted in the small size of the arteries distributed to the lungs; in consequence of which, the trunk and orifice of the pulmonary artery and the right ventricle were unusually large, and the foramen ovale imperfectly closed; the left ventricle and aorta being small. The heart was taken from a child of ten weeks, which had displayed slight cyanosis during life.

The third specimen was a heart taken from a girl of ten or eleven years of age, with whose history Dr. Peacock was unacqaainted. The interesting points in this case were, first, a deficiency of the base of the inter-auricular septum, with a perfect closure of the foramen ovale. The deficient space allowed of free communication between the two auricles, so that there could only be said to be one auriculo-ventricular aperture. 2ndly. A distinctly tricuspid form of the left auriculo-

ventricular valve; and 3rdly, a deficiency at the base of the septum of the ventricles, closed by an extension of the anterior fold of the left auriculo-ventricular valve, and the subsequent expansion of this membrane into a small sac, having an aperture communicating with the cavity of the right auricle. Dr. Peacock suggested, that had this patient survived a few years longer, the sac and the opening into the auricles would doubtless have enlarged, and have assumed, both in the symptoms during life, and the appearances after death, a very close resemblance to a true aneurism of the undefended space of the base of the ventricular septum, which had opened into the right auricle.

Mr. Crisp exhibited two specimens of *Diseased Heart.*

The first Mr. Crisp believed to be one of "concentric hypertrophy of the left ventricle." The specimen was taken from a woman aged seventy-nine. She was only seen twice before death, and then appeared to be in great pain, but owing to mental imbecility, was unable to describe her symptoms.

Nothing remarkable was observed about the thoracic or abdominal viscera: the thoracic aorta and branches being more than usually healthy. The abdominal aorta, for three inches above its bifurcation, was converted into a firm bony cylinder. The right internal iliac nearly impervious from ossific deposit; the left less ossified: the common and internal iliacs were tolerably heathy. In the lower part of the thoracic aorta was a dense fibrinous coagulum, occupying the calibre of the vessel, but not adhering to its sides. It was composed principally of fibrin, with a few blood globules.

Case 2.—The patient from whom this heart was taken first came under Mr. Crisp's care in April, 1841, when he was fifty-six years of age. His health before this period had been tolerably good, with the exception of slight attacks of difficulty of breathing. (His father died suddenly of angina pectoris, at the age of fifty-five.) At that time he suffered from great difficulty of breathing, which came on suddenly, pain and sense of oppression at the præcordia; pulse irregular; heart's sounds normal, but its impulse increased; pain in the left arm, extending to the elbow, and sometimes affecting the little and ring fingers; he had also violent pain in the epigastrium, so as to induce him to suppose that he was passing gall-stones, although none could be discovered in the evacuations. These symptoms continued for several days; he was bled from the arm, leeches and fomentations were applied to the side, and small doses of mercury given, so as slightly to affect the gums. He gradually improved in health, and was able to resume his usual avocations; he suffered, however, from frequent attacks of angina pectoris, and the pain in the left arm and fingers was at times very severe, lasting occasionally for four or five days; latterly, he had pain also in the right arm and shoulder. About eighteen months since, he suffered from acute pain in the left side, and a few days afterwards, a small calculus was voided with the urine. Of late, his health had been better than usual.

Three days before his death he complained of excruciating pain in

the left arm and little finger, which was somewhat relieved by warm applications, but it soon returned. He also complained of a sense of oppression in the region of the heart—"as if (to use his own expression) the heart had been bound down." (The pain and oppression varied in severity, but continued more or less to the time of his death.) The pulse was about the same as usual, except during the acute attacks of pain, when it was quickened and less bounding. He retired to bed about half-past ten on the night previous to his death, slept for five or six hours, and in the morning expressed himself easier than he had been for two or three days. He was able to dress and shave himself, and walk down stairs; and whilst in the act of getting his breakfast, his head suddenly fell forward, and he died instantaneously.

Examination, twenty-two hours after death.—Body warm; blood fluid; face very pallid; great abundance of fat, about three inches in thickness, on the abdominal parietes.—*Chest:* Numerous pleuritic adhesions on the left side. Both lungs gorged with black blood, especially the left, but the blood was confined to its proper vessels. The heart was large and flabby, (weight about fourteen ounces.) Both the coronary arteries were ossified in various parts, in some places so as to form a bony cylinder; the left ventricle dilated; both auriculo-ventricular openings large; but the mitral and tricuspid valves appeared to have performed their proper functions. The aorta was of its usual calibre, but it contained numerous elevated patches of cartilaginous and atheromatous deposit, as well as three bony plates; its colour natural. Liver large, but its structure apparently healthy. The gall-bladder filled with calculi, and its duct impervious, (as in the case which was related to this Society by Mr. Crisp a few weeks since.) Right kidney double its natural size; left, small; pelvis of both congested; the right contained a small phosphatic calculus. Brain not examined.

Dr. F. H. Ramsbotham presented an *Infant's heart, possessing only one Auricle and one Ventricle.*

It was situated in its natural position in the chest. The auricle was separated from the ventricle by tendinous valves. There was only one artery, the aorta, arising from the ventricle, which sent off a vessel in the situation of the ductus arteriosus. This artery divided into two branches, which supplied the lungs. The venæ cavæ and the two right pulmonary veins entered the auricle in their ordinary positions and directions, the pulmonary veins of the left side forming one common trunk before their termination in the auricle. The vena cava inferior, however, had been destroyed by opening the auricle, and the branch passing from the aorta, which divided into the pulmonary arteries, had unfortunately been cut away in removing the heart from the body.

The child was of full time, well developed, and lived ten days. The late Dr. Combe, who attended it during its short life, stated that cyanosis was perfect over the whole body, but that neither the respi-

ration, temperature, nor muscular action, were materially affected. This preparation is mentioned by Dr. Farre, in his work on the "Malformations of the Human Heart;" and a detailed description of it, accompanied by two figures, is given in the ninety-fifth volume of the *Philosophical Transactions*, at page 228.—*London Lancet.*

Erysipelas of Newborn Children By Prof. Trousseau.—This is one of the most dangerous maladies which can affect the newborn child, not only in hospitals but in private practice; it is almost invariably fatal, particularly during the first month of extra-uterine life. Its danger gradually decreases as the child grows older; but still, after the fourth month, about one-half of the infants affected with it sink under its symptoms. The first appearance of this malady is treacherously insignificant: the child has merely lost a little of his good humour; his sleep is slightly diminished, and he sucks rather less than before; at the same time the skin of the pubes is the seat of a small red patch, painful to pressure; the redness gradually gains in extent on the body and limbs, and is occasionally disseminated; but when, in their turn, the foot and hand become affected, they acquire a degree of swelling and redness far greater than that assumed by the eruption in any other region. The genital organs sometimes sphacelate, in consequence of the local inflammation, and in many cases acquire an emphysematous appearance. The pubes is not the only part from which the erysipelas may take its departure: it has been observed to arise from the redness which surrounds the vaccine pustule, less frequently from any accidental laceration of the skin, or from any one of those divisions so common in the inguinal or other cutaneous folds. The general symptoms are interesting in many respects, and amongst others, because their mildness almost inevitably leads the unwary to commit errors of prognosis, which in private practice are neither forgotten nor forgiven. At first the disease appears perfectly local; it is not until several days have elapsed that general uneasiness and crossness show themselves. The colour of the skin, the expression of the countenance, often remain for some days perfectly satisfactory, when suddenly an ashy cadaverous paleness is observed, and with that degree of intensity that the child seems to be sinking under copious hemorrhage. The cry becomes incessant, jactitation continual, and loss of sleep absolute. These signs are followed by deep stupor and death; the pulse is at first frequent, and the heat of the skin ceases only during the terminal and fatal stupor. Convulsions, diarrhœa, and vomiting are very seldom met with. When the progress is such as we have described, peritonitis has occurred—a frequent disease in children, and one which has not been hitherto described. The duration of the disease varies considerably, sometimes being frightfully short, at others, on the contrary, being prolonged so far as three weeks.

On *post-mortem* examination the cutaneous alterations are occasionally the only changes observed; but when peritonitis (a frequent complication) has been present, the umbilical vein is often found in-

flamed and filled with pus as far as the transversal furrow of the liver, and inflammatory secretions are found on the peritoneal surface of the abdominal viscera.

Of the probable cause of the malady we may say this much, that we observe it principally when an ill wind of puerperal fever blows over the lying-in hospitals of Paris. The children seem to have inherited from their mother a purulent diathesis, and they appear still to be within certain limits subject to the same ailments as the mother, whose constitution has so lately been theirs. The peritonitis of the children may be, therefore, as aptly termed puerperal as that of the mother, because its general cause is to be sought for in the circumstances which have accompanied the last stage of child-bearing and parturition. It is natural that the skin should be the seat of disease, because that surface has been so lately called to perform functions as new as they are important; in such children the unbilical cicatrix does not form readily, and is sometimes the occasional, the local, cause of the cutaneous disturbance. With regard to the treatment, we have tried almost every local application imaginable, and without success; ointments, lotions, blisters—even the actual cautery—without suspending the progress of the disease. Three cases only have we seen recover during the first month under the use of the ethereal solution of camphor, and of baths containing corrosive sublimate; but in how many have we not since tried the same methods without the slightest benefit! —*London Medical Times.*

Lectures on Distortion of the Spine not connected with Caries, delivered in the Theatre of St. George's Hospital. By Sir B. C. Brodie, Bart. F. R. S.—In a person of what is called a good figure, when the feet rest on the ground with the heels in contact, the lower limbs being straight, and the upper limbs occupying the same position on the sides, the spine rises perpendicularly in the same line with the *os sacrum*, and making on each side the same angle with the pelvis; the centre of gravity being somewhere in the middle line of the body. Whatever causes the centre of cavity to shift its place so as to be on one side of the central line, will necessarily cause some alteration in the position of the spine. A heavy weight in one pocket, or held in one hand, where there is none in the other; the greater height of the heel of one shoe, or an unequal leaning on the two lower limbs: even such trivial matters as these will occasion more or less of lateral deviation of the spine. If from any cause whatever, the centre of gravity be moved far away from the spine, the individual would necessarily fall to the ground if he were not to make an effort to prevent it. The result of that effort is, that, while the cause first in operation, whatever that may be, produces a bending to one side in one part of the spine, by the action of the muscles another part of the spine is bent in the opposite direction: and thus, in all cases in which a lateral curvature exists, the curvature is double, the whole spine assuming a form which is usually, and not very inaptly, com-

pared to that of the italic *S*. The degree of such curvature of course varies in different cases. In many persons it is so trifling as to be scarcely perceptible, in others it is so considerable as to become a great and obvious deformity.

From whatever cause the spine becomes affected with a lateral curvature, it cannot but happen that the effects of it should extend to other parts of the trunk. The ribs corresponding to the convex side of the curvature are at their anterior extremities separated from each other by a wider interval than is natural, while on the opposite side they are, as it were, squeezed together, and compressed into a smaller compass. The *os ilium* of one side appear to be more prominent than that of the other; and there is a corresponding change in the appearance of the scapula, and clavicles, and even of the sternum. I notice these changes only briefly at present; I shall explain them more particularly hereafter.

No part of the body can be permanently displaced without undergoing an alteration in its figure. In a case of unreduced dislocation of the humerus, the old glenoid cavity is absorbed, and a new articulating surface is generated on the lower margin of the scapula, while the head of the humerus becomes reduced in size, and otherwise altered so as to correspond to the parts with which it is now in apposition. In like manner, in an established case of lateral curvature of the spine, the bodies of the vertebræ are found reduced in thickness on one side, increased in thickness on the other; the ribs bulge unnaturally in one place, and are unnaturally depressed in another: and corresponding changes takes place in the clavicles and sternum, and even in the scapulæ. These changes are produced the more readily, because when lateral curvature exists it almost invariably begins to show itself in early life, while the process of growth is going on. These facts should be borne in mind, with a reference to practice. As deviations from the natural figure occur with more facility during the period of growth, so is the restoration of the natural figure more easily obtained during the same period also. The treatment of the disease cannot be begun too soon after the first signs of spinal curvature are perceptible, and little or no benefit can arise from the continuance of the treatment after the period of growth is completed.

Having made these preliminary observations, I am better enabled to explain to you the various circumstances in which lateral curvature of the spine may have its origin.

If one lower limb be shorter than the other, the ilium on that side (both feet being planted equally on the ground) must necessarily be depressed, and a double curvature of the spine is the consequence, produced in the manner which I have already mentioned; that is, one by the altered position of the pelvis, the other by the muscular effort which the patient makes to keep the centre of gravity in its proper place.

A difference in the length of the two limbs is in some instances the result of original formation. I have had young persons brought to me because one shoulder was observed to be higher than the other,

(this being usually the first thing observed in the commencement of a lateral curvature of a spine,) and in whom I have found the *femur and tibia* on one side respectively shorter than the *femur and tibia* of the other, although there neither were at the time, nor had been previously, any indications of disease in either limb. At other times, however, the difference in the length of the femur or tibia is clearly to be traced to disease. A diseased bone may grow less rapidly than the corresponding bone which remains in a healthy state. Thus, in a case of scrofulous affection of the bones of one finger, it is very common for the finger thus affected not to grow at all, while the other fingers grow as usual. The reverse of this also may happen, and the diseased bone in certain cases becomes actually longer than its fellow of the opposite side. So it was in two cases of necrosis of the femur, of which I have preserved notes, and which had in consequence been mistaken for cases of disease of the hip-joint. Now, in such cases as these which I have just described, it must be evident to you that the only thing to be done is to endeavor to equalise the length of the limbs by making the sole of one shoe thicker than that of the other. Nothing done to the spine itself can be of the smallest service. Indeed, for the most part, in these cases, the curvature of the spine is trifling. The addition of a very little cork to the sole of one shoe will be sufficient to prevent its being observed at all: and a clever shoemaker will easily manage so that the difference of the two shoes will be imperceptible also.

Those last observations will apply equally to another class of cases, in which, after fracture of the femur, or even of the tibia, the limb is shortened, and curvature of the spine is the consequence. Nothing done to the limb can restore its proper length, and nothing done to the spine itself can restore its proper figure. A thick sole to the shoe is the only remedy.

In a young person who has recovered from disease of the hip-joint after the formation of abscess, (and in some cases even where suppuration has not taken place,) the limb on the side of the disease is left considerably shortened. The shortening of the limb is sometimes the consequence of actual dislocation; at other times it arises from the margin of the acetabulum having been destroyed by ulceration, or from a partial destruction of the head of the femur, the limb being afterwards drawn upward by the action of the glutæi muscles. In whatever way the shortening of the limb is produced, it necessarily happens that as soon as the patient begins to walk the spine becomes distorted. There is, however, in many of these cases, another cause operating so as to produce the same result. The patient has been lying for a long time in bed without any particular attention being paid to the position in which he has placed himself, and this position has probably been that of lying on one side with the spine twisted laterally. The lateral curvature thus produced of course continues to exist when the patient first begins to stand and walk. Now of these two kinds of curvature the first is evidently irremediable; but the latter

admits of considerable, and perhaps of complete, relief, under a simple mode of treatment, which I shall explain to you hereafter.

There is a peculiar paralytic affection to which children are liable, and which I have in my lectures been accustomed to describe under the name of *infantile paralysis*. The child (generally after suffering from an attack of fever,) exhibits symptoms of what is commonly called "determination of blood," to the brain and not improbably has an attack of convulsions. Then, all at once the muscles of some part of the body lose their power of acting under the influence of the will. In a few cases, recourse being immediately had to the exhibition of mercury, the paralysis is relieved. In the majority of cases it is not relieved at all, but remains unaltered through the rest of the patient's life. Now, if this has happened in one of the lower limbs, you need only refer to the observations which I made in the beginning of the lecture to be satisfied that a lateral curvature of the spine must be the consequence. One lower limb will support the weight of the body, the other will not support it: one limb is heavier than the other, and one limb only is exercised. The pelvis under these circumstances must become depressed on one side more than on the other, and a lateral inclination of the spine will follow depression of the pelvis. In some instances all the muscles of the leg and thigh are paralytic, and the whole of the lower limb is useless to the patient. In other cases perhaps not more than one or two muscles are thus affected, and the curvature of the spine varies accordingly.

In a very few of such cases, where the paralysis is of limited extent, the application of an instrument which in some degree supplies the place of the muscles whose power is deficient may be useful in assisting the patient to retain the erect posture. In other cases, where, in consequence of the want of power in the antagonist muscles those of the calf of the leg are contracted, the heel being elevated so that it cannot be brought into contact with the ground, some good may be done by the subcutaneous division of the *tendo Achillis*. But the advantage obtained in either of these ways is of limited extent, and beyond what I have just mentioned nothing is to be expected from the exercise of our art.

The effect of paralysis on the figure of the spine is not confined to those cases in which the seat of the paralysis is in the lower limbs. Even a *partial* loss of power in the muscles of one of the upper limbs will, in a growing person, become a cause of spinal curvature, and in one case which fell under my observation, in which there had been, from infancy, a complete paralysis of *all* the muscles of the arm, forearm, and hand, the spine was as much distorted as it would have been in a case of recovery from diseased hip-joint with a very contracted limb. The distortion here is to be attributed to the difference in the weight of the two limbs, and the greater muscular action on the side opposite to that of the disease, combining to draw the centre of gravity out of the middle line of the body. Of course the case is beyond the reach of remedies. Nothing can restore the spine to its proper condition but the removal of the paralysis, a thing rarely to

be accomplished, even when you are consulted in the first instance, and of which there certainly can be no reasonable expectation at that later period when the attention of the parent is first called to the alteration of the patient's figure.

Another cause of lateral curvature of the spine is a difference in the capacity of the two sides of the chest. Hypertrophy of the heart, or a diminution in the size of one lung, will produce the same effect. I was consulted concerning a little girl in whom there was an unusual degree of this kind of distortion. On examination I found that she breathed with one lung only, and that the other side of the chest was reduced to a very small size, the ribs lying almost in contact with each other. The fact proved to be, that, two or three years before the period of my being consulted, she had suffered from a severe attack of pneumonia, in consequence of which the organization of one lung had been completely destroyed, so as to render it altogether useless, respiration being performed wholly by the other. Some mechanical apparatus had been recommended in this case with a view to relieve the spinal curvature; but I need scarcely explain to you why neither this nor any other kind of treatment can, under such circumstances, be of the smallest service.

It was the prevailing opinion formerly, and I believe that some hold the opinion still, that the common cause of a lateral curvature of the spine is a rickety condition of the bones. This view of the pathology of the disease is, however, not confirmed by the specimens preserved in museums of morbid anatomy, and no one who has seen much of these cases in the living person can doubt that the fact is otherwise. The altered shape of rickety bones, in which there is, as you well know, a deficiency of hard earthy matter (phosphate of lime) depends partly on the action of the muscles, but still more on the operation of the superincumbent weight. The greater the weight the greater is the distortion. Hence in a rickety child the disease is manifested first in the legs, then in the thighs, then in the pelvis, and afterwards in the spine. Now, in cases of lateral curvature of the spine, it rarely happens that there is anything like the rickety flexure of the lower limbs. In the rickety pelvis the two *ossa pubis* are as it were squeezed towards each other both behind and below the symphysis. The form of the brim of the pelvis is altered, the diameter of it being diminished in the direction from before backwards, and increased from side to side. One result of such distortion of the pelvis is, that parturition, at the full period of utero-gestation, is rendered either difficult or impossible. Nevertheless we meet with instances without number of women with very considerable lateral curvature of the spine who have born children with as little inconvenience as others whose spines were straight.

We are not, therefore, justified in regarding rickets as the common, or even as a frequent cause of spinal curvature: nevertheless, it is the cause of it in a few instances. The curvature in these cases is, for the most part, not merely lateral, but there is a bending of the lower part of the spine forward, so that the spinous processes project

posteriorly in the form of a segment of a circle. This circumstance, and the condition of the legs and thighs, afford sufficient grounds for our diagnosis.

What is to be said as to the treatment of this variety of distorted spine may be comprised in a few words, and will be more conveniently introduced here than in any other place. I know of no reason why the treatment of the rickety affection of the spine should be different from that of the rickety affection of the legs and thighs. Of this last I see a great number of cases. In a large proportion of them, heavy instruments of steel have been already applied, with a view to reduce the curvature. In others the same thing has been recommended either by instrument makers or surgeons, but the machinery has not yet been applied. Now what is the effect of this mode of treatment? The original curvature is probably removed, but in order that this object should be attained, the instrument must make pressure on at least two points, one in the limb above, and the other in the limb below, and at each of these points a curvature is produced which did not exist before, so that there is simply an exchange of one curvature for two others. Then the instruments are a great weight and encumbrance to the child. He cannot drag them about so as to take such an amount of exercise as is necessary for the maintenance of the general health. They harass and torment him; and as they are always liable to break, and be otherwise out of repair, they are an endless trouble and expense to the parents. There is only one form of the disease in which, according to my experience, the use of instruments is at all justifiable, and that is one of very rare occurrence, in which the flexure is confined to the superior epiphysis of the tibia, the tibia below the epiphysis being bent outwards, making an angle more or less obtuse with the femur, so that the sole of the foot is with difficulty placed on the ground. With this single exception, I have not seen a single case of rickety curvature of the lower limbs, in which, if the health could be improved, and the general vigour of the system maintained, the curvature did not disappear spontaneously without any kind of local treatment being had recourse to; while, on the other hand, under a continuance of bad health, every kind of local treatment has been ineffectual. I generally recommend that the child should live in the country rather than in a crowded city; that he should be as much as possible at the sea-side; that he should take some preparation of iron from time to time, the bowels being at the same time carefully regulated: that he should use a shower-bath every morning, cold in summer, with the chill taken off in winter; and that he should live on a plain but nutritious diet. In the early part of my practice I advised that he should be encouraged to crawl on the floor rather than to use his feet, and that instead of running about out of doors he should be taken into the fresh air in an open carriage. I am now convinced that this advice was wrong; that the general health cannot be maintained without exercise; that the more the limbs are used the better chance is there of the necessary quantity of phosphate of lime being deposited in the

bones; and that as the bones become harder so will they most certainly regain their proper figure, in spite of the weight which they have to sustain. Even in what might be termed a bad case of rickety affection of the limbs, three or four years, and in slighter cases a still shorter period, will generally be sufficient for this beneficial change to be brought about. From what I have already said, you may be aware that I have a more limited experience of rickety disease as it exists in the spine than as it exists in the extremities; but nevertheless I have seen enough of it to be satisfied that the plan of treatment which is the best adapted in the one case is also the best adapted to the other.—*Lon. Med. Jour.*

On the Nature and Sources of the Contents of the Fœtal Stomach, being the substance of a Paper communicated to the Royal Society of London, in June last. By GEORGE ROBINSON, M. D., Fellow of the Royal Medical and Chirurgical Society of London, and Joint Lecturer on Materia Medica and Forensic Medicine in the Newcastle-on Tyne Medical School.—Whilst all physiologists who have examined the appearances presented by the alimentary canal of the fœtus, agree in representing *the small intestines* as actively engaged in the function of digestion, a remarkable difference of opinion has prevailed as to the source of the nutritious matter there submitted to that process. Harvey, who, of modern physiologists, alone supposes it to enter the intestine through the stomach, adopts the views of the older writers, and concludes, from his observations, that it is the liquor amnii swallowed by the fœtus, which affords the material for chylification. Geoffroy Saint-Hilaire, perceiving the anatomical objection to this doctrine, which arises from the fact of similar appearances have been found in the intestinal canal of fœtuses born with an imperforate œsophagus, would seem to suppose that the superior portion of the intestines, being irritated by its contact with the bile, secretes a nutritive mucus, by the digestion of which chyle is formed. And Dr. Robert Lee, who is, I believe, the most recent investigator of this subject, has been led by his researches to the conclusion that the liver is the source of the nutritious fluid found in the alimentary canal of the fœtus; the function of that gland being, in his opinion, not merely that of separating from the blood an excrementitious substance, but also that of pouring into the fœtal intestines, through the hepatic duct, a quantity of albuminous fluid.

Now, even though a quantity of albumen may be present in the bile taken from the hepatic duct, it is surely desirable that the impossibility of the nutritive contents of the small intestine having been derived from the fœtal stomach should be clearly demonstrated, before we admit the correctness of this latter conclusion as to their source. But it will be seen by a reference both to systematic writers, and to the authors who have more expressedly treated of the fœtal functions, that the evidence yet advanced is by no means sufficient to establish any positive opinion on this point.

Dr. Lee thus describes the result of his own examination of the stomach in several human fœtuses: "The stomach of the fœtus I usually found in these cases distended with a semi-transparent, ropy, mucous, and occasionally acescent fluid without any sensible admixture of albuminous or other apparently nutritious matter." Dr. Blundell, whose opinions on any point connected with the uterine or fœtal functions I consider to be worthy of every attention, has but the following brief allusion to the subject: "The stomach of the fœtus is not unfrequently empty, or nearly so; and when it does contain anything, if I may judge from some two or three observations, this matter consists of a mucous secretion mixed with the gastric juice." And in the systematic works on physiology, I do not perceive any mention of the subject further than an incidental statement that the fœtal stomach contains a mucous fluid. The time which I could myself devote to this inquiry, and my opportunities for conducting it, have been too limited to enable me to attempt anything like a full and final settlement of the various questions connected with this department of fœtal physiology. The few facts which have fallen under my notice are, however, sufficiently distinct to establish some positive inferences, and I can only hope that the results of this rude effort may induce others better qualified for the investigation to extend and complete our knowledge of this interesting group of functions.

My attention was first attracted to the subject in the autumn of last year, by an accidental observation of the stomach of a fœtal rabbit, and having subsequently examined the fœtuses of other animals, I met with a number of curious facts, of which the following is a brief account.

Observation 1. During the last ten days of its uterine existence, the stomach of the fœtal rabbit is invariably distended with a semi-transparent fluid, of a dark green colour, extremely viscid, and coagulating by heat into a solid opaque mass. Viewed microscopically, it is found to consist of a clear liquid, suspended in which are numerous cells of different shapes, and several large globules of oil. When heated in a watch glass over a spirit lamp, it assumes the appearance of a piece of baked custard; and on dropping it into boiling water, it also instantly solidifies. Dried by a more gentle heat, it forms a brittle substance like gum, which, on being dissolved in water, answers to every test of albumen. A small quantity of the fresh liquid which had been excluded from the air in a test tube, on being examined at the end of six months, though it had acquired a disagreeable odour, was found to retain all its chemical properties, coagulating as readily as when recently obtained. The stomach was in these cases extremely pale, and presented very little vascularity; whereas the small intestines were plentifully supplied with blood-vessels. The chymous substance which the latter contained, was evidently derived from the stomach, becoming however more opaque, as it gradually assumed the situation of the meconium. This latter substance, of a bright green colour, exhibited a curious reaction with strong nitric acid, the addition of a few drops of the latter instantly causing it to assume a bright scarlet hue.

In three instances, a liquid, precisely resembling that contained in the stomach, escaped from the mouth of the animal as it lay on its side before being opened; and in two other cases, the same substance was found in the œsophagus. The liquor amnii of these animals is a transparent, almost colourless fluid, exhibiting scarcely any indication of the presence of albumen. In two instances where I had an opportunity of watching the fœtus through the transparent membranes, it was observed to swallow the liquor amnii, and from its continuing to perform the act of deglutition after its removal from the uterus, the stomach was found extremely distended with air, each mouthful of which appearing as a little vesicle, was preserved distinct by the viscidity of the stomachic fluid. The facts detailed in this observation are drawn from the examination of more than thirty animals.

Observation 2. The uterus of a rabbit, killed about the *tenth day* after impregnation, contained six fœtuses, an inch and a half in length, and the tissues of which were still very gelatinous. Through the transparent walls of the abdomen, the dark globular stomach of each was distinctly visible, and on opening the peritoneal cavity, it constituted, with the exception of the liver, the most prominent object presented to the eye, being in every case distended with a liquid of a dark green colour. This fluid was perfectly transparent, *presented no microscopical object, was not at all viscid, and did not undergo any change on the application of heat or nitric acid.*

The intestines were in these animals extremely minute and tortuous, translucent, and almost void of meconium, or any other coloured substance. The quantity of liquor amnii was greater than that met with in the former observations, and its opacity, on the application of the tests for albumen, if anything rather more distinct.

Observation 3. In a fœtal lamb examined at a very early period (for its weight did not exceed two ounces,) the stomach contained two drachms of a clear, citron-coloured liquid, which was neither viscid, nor did it present any opacity or change on the application of heat and nitric acid. The quantity of liquor amnii was relatively large; six ounces of it were collected, and in its colour, consistence, and chemical properties, it precisely resembled the fluid obtained from the fœtal stomach. The intestines were very minute and tortuous, and with the exception of a small quantity of serous fluid, apparently empty.

Observation 4. In another fœtal lamb which was fully developed and ready for birth, the stomach, on being opened, presented a substance differing very much from the liquid just described. It contained an ounce of a viscid, transparent semifluid mass, suspended in which and gradually subsiding in it, so as to form a sediment, were numerous minute, oval, brown particles, in shape and colour very much resembling grains of linseed, but somewhat larger, and around each of them was a quantity of an extremely tenacious, gelatinous substance of a yellow colour. Neither the supernatant liquid nor the liquor amnii evinced the presence of albumen, though both possessed considerable viscidity. A substance precisely similar to the yellow

gelatinous sediment found within the stomach, existed in considerable quantities upon the fleece, the legs, and the whole exterior of the animal; *but on the most careful examination I could not detect in any other part of the fœtal structures or appendages, a single particle corresponding to the brown oval masses met with in the stomach.*

The intestines, in addition to some meconium, contained a chymous mass, the liquid portion of which was distinctly albuminous.

Observation 5. The liquor amnii of a fœtal calf, (which was examined at a very early period, when its body weighed only nine ounces) was of a citron colour, neither viscid nor coagulable by heat or nitric acid, but instantly formed an opaque membranous coagulum on the addition of a little acetate of lead, or proto-nitrate of mercury. The stomach of the same animal contained two drachms of a fluid, which in every respect resembled the liquor amnii, and which, on standing, did not present any sediment or coloured flocculi. In the intestine was a small quantity of meconium, which, on being heated with nitric acid, exhibited the usual change of colour, from a green to a reddish hue.

Observation 6. In another fœtal calf of considerable size, (presumed to be in the ninth month of uterine existence, and which was examined twelve hours after death,) the stomach contained four ounces of a yellow glairy fluid, in which, as it lay in the stomachic cavity, were suspended three or four fibrinous masses of a dark, brown colour. On allowing these matters to stand for some hours in a cylindrical glass vessel, the quantity of the coagulum or sediment was very much increased, so that its bulk ultimately became equal to the tenth part of that of the supernatant liquid. This latter was slightly opaque from the presence in it of innumerable minute globules, resembling those formed during the coagulation of albumen, and though extremely viscid, it furnished no coagulum on the application of heat and nitric acid singly and in conjunction, the only effect produced being the gradual formation of a pellicle on its surface as the liquor evaporated. Of a few other tests which were applied, sulphuric and muriatic acids caused no change whatever in the appearance of the fluid; ferro-cyanide of potassium, assisted with acetic acid, tincture of galls, sulphate of copper and alum, slightly increased its opacity, and the addition of a drop of solution of acetate of lead or proto-nitrate of mercury, was instantly followed by the appearance of an opaque membranous coagulum.

Imbedded in the coagulum or sediment, which was of a reddish brown colour and semi-transparent, were several thin yellow scales, perfectly opaque, and insoluble in boiling liquor potassæ, whereas the remainder of the fibrinous mass readily dissolved in that liquid. From the clear solution thus obtained, copious flakes were produced on its neutralization by muriatic acid.

In the mouth of this animal was found some glairy fluid, very similar to that met with in the stomach; and lying on the outer surface of the gums, particularly those of the lower jaw, were several of the peculiar yellow flakes just described.

The liquor amnii was clear, almost colourless, and, though somewhat viscid, did not with the usual tests afford any indication of albumen, being coagulated only by acetate of lead and proto-nitrate of mercury. *It contained none of the matters which constituted the coagula found in the stomachic fluid.**

Observation 7. The stomachs of two newly born kittens contained a brown, semi-transparent, viscid substance, which, on the application of heat or nitric acid, evinced the presence in it of a considerable quantity of albumen, but did not wholly coagulate. The portion which retained its transparency did not, however, manifest any disposition to dissolve in the boiling water. The contents of the small intestine were also albuminous.

In the œsophagus and fauces of one of these animals was found some of the same brown, viscid, semi-albuminous substances; and it may also be worthy of mention, that the quantity present in the stomach of this animal (which had lived a few hours after birth) was much less than in the other case.

Observation 8.—In each of two puppies, drowned immediately after birth, the stomach contained about half an ounce of a transparent, slightly viscid fluid, suspended in which were several large flakes of a light yellow or lemon colour, each flake being surrounded by an extremely tenacious gelatinous substance. On testing the clear supernatant liquid, it was found to be distinctly albuminous, an opaque stratum of coagula being deposited on the application of heat and nitric acid. A portion of one of the flakes and the adjacent mucus being examined under a high magnifying power, presented, in addition to epithelial scales and some oil globules, several minute particles of different shapes, a few appearing as perfect circles or rings, others of a crescentic form, and the remainder as rhomboidal and linear particles.

Observation 9.—The stomach of a human fœtus of about the fifth month, examined thirty hours after birth, was found moderately distended. On laying it open, a reddish coloured fluid escaped, and this was followed by three or four semi-transparent gelatinous masses. The largest of these was then placed in a watch-glass containing distilled water, and heat applied. As the temperature of the water approached the boiling point, numerous flakes were seen to radiate from the floating body; and as the process of ebullition proceeded, this latter became throughout its whole substance, firm and opaque, so as to constitute a perfect coagulum. Another mass was treated with nitric acid, and wherever the latter came in contact with it, an instantaneous coagulation took place. The contents of the small intestines were

* A quantity of the peculiar milky fluid, secreted by the spongy structures which receive the highly vascular fœtal cotyledons, and collected from them by pressure, on being heated, instantly coagulated into a firm mass. With the single exception of its colour being rather that of cream, than a distinct yellow, this substance precisely resembled the coagulum obtained by heating the contents of the stomach, of the mature fœtal rabbit. And in its chemical and nutritive properties this secretion presents a striking analogy to the colostrum furnished to the animal immediately after birth. The secretion of these structures was, in the mature fœtal lamb, also found to possess a similar property.

arranged in separate portions, in the order of their proximity to the stomach; and the liquid pervading them, on the addition of the same test, also evinced the presence of albumen, the relative quantity of this principle gradually decreasing as the chymous mass assumed the properties of meconium. My friend Dr. Glover was present at this observation, and kindly assisted me in its performance.

Observation 10.—The stomach of an infant, supposed to have died immediately after birth, but which was not examined till about forty hours afterwards, contained half an ounce of a remarkably viscid, reddish, semifluid substance, for the most part transparent, but presenting in its interior and on its surface, several opaque white striæ. On boiling a portion in distilled water, it became uniformly opaque, but did not acquire much additional firmness. Heated with strong nitric acid, a clear solution was obtained, from which, on its neutralization by liquor ammoniæ, a copious flaky deposit took place; and the same circumstance occurred with an alkaline solution, when rendered neutral by the addition of nitric acid. The white striæ were of a fatty nature, as evinced both by their chemical properties and microscopical appearance, being chiefly constituted of fat cells. A transparent viscid substance contained epithelial scales, oval nucleated cells, and a diffused granular matter. This substance could be traced into the duodenum, where it gradually became more opaque, and evidently constituted the material for chymification.

From all these facts, we may, I think, draw the following general conclusions:—

1. That the stomach of the fœtus, during the latter period of its uterine existence, invariably contains a peculiar substance, differing from the liquor amnii, and generally of a nutritious nature.

2. That in its physical and chemical properties, this substance varies very much in different animals, being in no two species precisely similar.

3. That in each fœtal animal the contents of the stomach vary much at different periods; in the earlier stages of its development, consisting chiefly of liquor amnii, to which the other peculiar matters are gradually added.

4. That the liquor amnii continues to be swallowed by the fœtus up to the time of birth; and consequently after the formation of those matters, and their appearance in the stomach.

5. That the mixture of this more solid and nutritious substance with the liquor amnii constitutes the material submitted to the process of chymification in the fœtal intestines.

The opinion that the fœtal chyle is principally formed from these matters, however, by no means implies a supposition that the *nutrition* of the fœtus is thus accomplished. For the actions which proceed in the chylopoietic viscera of the fœtus are, I imagine, chiefly useful from their gradually preparing the different organs for the important functions assigned to them in the economy of the mature animal. Whereas the nutrition of the fœtus is undoubtedly effected by its placental vessels, the venous capillaries of which (or to speak more correctly,

the streams traversing them) possess an absorbing power precisely similar to that of the mesenteric veins. And as a portion of the fœtal blood, charged with the albuminous substance there absorbed, after passing through the umbilical vein, circulates in the blood-vessels of the liver, the presence of an albuminous fluid in the hepatic duct, as noticed by Drs. Lee and Prout, is by no means inexplicable. Viewed in this light, the umbilical vein of the fœtus will answer to the mesenteric veins of the adult, while the ramifications of the hepatic duct, in addition to their ordinary functions, may be considered as to a certain extent representing the lacteals.

The source of the peculiar substances found in the stomach of the fœtus still, however, remains to be determined. That they are not secreted by the stomach itself is, I think, rendered almost certain, by the uniformly pale, undeveloped condition of that viscus during fœtal life, and by the circumstance of their being occasionally met with in the fauces and mouth of the animal, as in observations 1, 6, and 7. And coupling this latter fact with the negative argument constituted by the impossibility of assigning their productions to any other organs, I am disposed to regard them as the secretion of *the salivary glands*, between the development of which and the gradual formation of these matters a certain degree of connection has appeared to me to exist.

Having thus briefly mentioned the facts met with in the course of this investigation, and indicated the conclusions which appeared to me to flow most directly from the consideration of those phenomena, I shall for the present abstain from any further inquiries into this department of physiology. But, before concluding this communication, I may be permitted to relate one or two additional observations, which tend to establish an interesting and important relation between two of the chief functions in the animal economy, viz. respiration and digestion.

I have before had occasion to corroborate, from my own observation, the statements of other inquirers as to the slight vascularity and torpid condition of the stomach during fœtal life. It became, therefore, an interesting problem to trace the gradual development of its digestive power, and to ascertain the precise period at which the effect of this power became perceptible.

The contents of the fœtal stomach were, in several of the foregoing observations, tested by litmus paper with very different results, the gastric fluid being in some cases neutral, sometimes alkaline, and in a few instances feebly acid. As the tissues and fluids of the fœtus, however, always manifest a strong tendency to acescent decomposition, and as the indication of acidity was generally noticed in cases where some delay had taken place in the examination of the gastric contents, I am not prepared to deny the possibility of this acescency having been the result of chemical changes taking place after death. A far more satisfactory test of the presence of the proper gastric juice, and consequently of the commencement of its digestive function by the stomach, was, I thought, to be found in the chemical action of that secretion upon albuminous fluids. And, as a liquid readily coagulating

upon the application of all the common tests for albumen exists naturally in the stomach of the mature fœtal rabbit, a few observations upon these animals, performed at different periods after birth, promised to throw some light upon the subject.

Observation 11.—Two rabbits from the same litter were examined at the end of thirty hours after birth. In one (which from the appearance of the lungs, had evidently respired, but which was found dead within a few hours after the presumed time of birth,) the stomach, both as regards its vascularity and the nature of its contents, precisely resembled that of the advanced fœtus of the same species. Its coats were pale, and the blood-vessels distributed through them scarcely perceptible; while the substance within exhibited all its usual properties, being the same green, transparent, viscid, semi-fluid, coagulable mass as that invariably met with in the mature fœtus.

But the stomach and its contents in the other rabbit (which, though separated from the doe, had lived up to the moment of examination) presented a very different appearance. Its coats were beautifully injected with innumerable blood-vessels, and their thickness was apparently increased; whilst in its interior was *a large flattened coagulum of a greenish-yellow colour*, possessed of considerable tenacity, and exhibiting in its substance, when viewed microscopically, several oil globules, similar to those noticed in the uncoagulated matter.

Nothing could be more striking than the difference between these two stomachs; and, from a single positive observation like this, we are, I think, justified in concluding, that the formation of the gastric juice does not take place till the act of respiration has proceeded for a certain length of time, and rendered the oxygenation of the blood tolerably complete. In two other rabbits, killed at the end of twenty-four hours after birth, the albuminous contents of the stomach were similarly coagulated, its coats being also highly vascular, and a portion of the same green coagula being found in the duodenum. All these animals were removed from the doe before any milk could have been swallowed. In the following observation the young animal was allowed to feed with the rest.

Observation 12.—A young rabbit being killed the third day after birth, was instantly examined. The coats of the stomach, which was very much distended with food, were highly vascular, so as to assume a rosy tint. It contained a great mass of coagulated milk, in the midst of which, and rendered conspicuous by the snow-white ground on which they were placed, appeared two half-digested coagula, of a dark greenish-brown colour. These were evidently the remains of the fœtal secretion; and, in the duodenum of the same animal, at the distance of two inches from the stomach, were several small acicular particles of a fatty nature.—*London and Ed. Monthly Journ. Med. Science.*

Fungus tumour of the Bones By Professor Roux.—A man aged thirty-eight, of a strong constitution, was lately admitted into the Hotel Dieu, for the treatment of a tumour, which had formed three

months since in the right knee. At the beginning of the disease he made, on two occasions, a violent effort with the limb, and each time a very painful sense of distention was experienced in the joint. On examination two tumours were distinguished, one on either side of the tuberosity of the tibia; pressure reduced them to a certain degree, and at all times they were the seat of pulsations synchronous to the pulse. The skin had retained its natural colour, and the patient complained only of weakness of the extremity.

After relating the case, the Professor proceeded to state that this tumour should be considered as an aneurismal affection, occupying the spongy texture of the head of the tibia. "This," continued M. Roux, "is an uncommon disease, or at least one which authors have seldom described. Fifteen or eighteen cases at most are on record. For my part, during an experience of thirty years of hospital practice, I have met only with three or four, the last of which I observed not more than two years ago; a complete cure was obtained by ligature of the femoral artery."

These tumours are almost constantly found in the bones of the extremities, particularly the lower, and in the parts which contain a greater quantity of spongy texture. The tibia is most usually occupied. An external injury, a blow, or a sprain, seems to have produced it in every instance, although it certainly is not easy to understand what influence external causes can have on the aneurismal developement of the arterial capillaries of a bone; still the fact is one confirmed by too frequent observations to admit of doubt. In a case related by M. Lallemand, a rheumatic or gouty predisposition seemed to have caused the malady; and in a most interesting observation of Scarpa, the same predisposition is stated to have existed. In the present case it was after a violent effort to raise a carriage that the patient first experienced pain in the part, and it was also an effort of the same kind which produced the disorder in the patient he observed about two years ago. In one patient you may remark that the internal layers of the bone have been gradually absorbed, and that the fungous areolar growth lies immediately under the skin, forming irregularities in the outward aspect of the limb. Under the name of "angiectasy" we comprise only the diseases of any part of the vascular system attended with dilatation of the vessels, and this great class may be subdivided according to the seat of the alteration in large vessels or in the capillaries. To the former belongs the history of aneurism; to the latter, the tumours of the nature of that which has occasioned this lecture. Fungous tumours of the capillary vessels may be met with in the soft textures or in the bones, and when they occupy the latter seat, they are not only remarkable on account of their unfrequency, but also by some other circumstances, which we will briefly enumerate. In the first place we observe that sanguineous tumours of the soft parts are generally prognosticated by the presence of nævi, whereas in the bones we have no reason to suppose that the developement of the disease is anything but accidental. A proof that a congenital disposition has little or nothing to do with

the aneurismal dilatation of the osseous capillaries may be found in the fact that in most cases external injuries have been the producing causes. Another material difference resides in the fact, that these tumours occupy indiscriminately the arterial or venous capillaries in the soft parts, and exclusively the arterial system of bones. A cancerous cement not unfrequently is superadded to the vascular transformation, and when this unfortunate complication is observed, the fatal result of organic disease are produced even before abundant hemorrhage could supervene. You are aware gentlemen, that, for the treatment of these erectile tumours of the soft parts, numerous methods are employed, and particularly within the last few years the progress of the art of curing has been, in this respect, truly remarkable. We recollect that twenty-five years ago, amputation was frequently considered as the only resource in cases which now-a-days would obtain relief by a great many plans, differing with circumstances, and with surgeons. Ligature, pressure, cauterization, puncture—simple, or combined with the application of heat or of electricity: such are the principal methods of treatment which would be resorted to.

As to fungous tumours of the bones, we know only of three operations by which a cure can be obtained:—ligature of the main artery of the limb, amputation of the extremity, and, in some few instances, resection of the portion of bone occupied by the malady. Ligature we prefer, in the present instance, for reasons which we will expose in another lecture.—*London Medical Times.*

Two Cases of Rupture of the Uterus—Recovery of One.—M. Robiquet was called to attend, in labour, a female, ætat. 32, who had previously had one child, and had never suffered under any symptoms of uterine disease; the present, her second pregnancy, had gone on favourably until about two hours before M. R.'s visit, when during a strong uterine contraction she felt something suddenly give way within her. It seemed to her as if her bowels had been torn, but soon an apparent calm succeeded this painful sensation.

On M. R.'s entrance he found the patient's countenance flushed, her skin moist, pulse 90, small and thready, respiration slow but regular; she had acute pain in the abdomen, with the sensation as of a weight rolling about in the middle of the belly and crushing the intestines, the uterine contractions were few and transient. The abdomen, depressed and irregular, had lost its rounded form, and permitted the limbs of the fœtus to be distinctly felt, and easily laid hold of through its parietes; and the child swayed from right to left, according to the movements of the patient. On vaginal examination, the head of the fœtus was felt at the uterine orifice. This latter circumstance induced M. R. to wait a short time, but finding that the powers of the mother were being rapidly exhausted, he applied forceps and extracted a female child, which lived only a few minutes. Scarcely was the fœtus expelled, when a soft rose-coloured slightly inflamed mass projected from the vagina and hung down between the thighs

of the patient; this was at once recognized as part of the small intestine and the epiploon. M. R. at once returned the intestinal mass into the vagina, and gently pushed it onward to the fundus of the uterus, in which, rather to the right side of that organ, he found an opening large enough to admit his hand to pass through easily. Having at length with some difficulty returned the whole intestinal mass through the wound, he passed his right hand through the laceration so as to cover its aperture, while with his left, externally, he used frictions over the hypogastric region, with a view of inducing uterine contraction, and for the same object fifteen grains of ergot were administered. After a lapse of two or three minutes, M. R. felt the edges of the wound to approach, and the body of the uterus to make some efforts at contraction. After a second contraction had considerably diminished the diameter of the laceration, M. R. gently drew his hand out of the wound into the cavity of the uterus, and applied it to the inner surface of the rupture, to prevent any projection of the intestines through the opening. A second dose of ergot had been previously administered, and in a short time the uterus contracted so powerfully that he was compelled to withdraw his hand from its cavity. A dangerous attack of metro-peritonitis followed, which was successfully treated in the usual manner. Symptoms of inflammation of the uterus continuing on the second day after delivery, M. R. introduced two fingers into its cavity, and finding a small knuckle of intestine protruding, he successfully effected its reduction. From this time the patient gradually improved, and was at length restored to complete health.

Second Case.—The following recently came under the notice of M. Dubois at the *Clinique d'Accouchements*:—The patient, ætat. 32, arrived at the termination of her third pregnancy, without any unfavourable symptoms. On the 9th June labour set in with pains, feeble, and recurring at long intervals. On the following day the membranes ruptured, accompanied with trifling hemorrhage; the labour pains ceased, and were replaced by continued and intermitting pain. The medical attendants, being ignorant of the true cause of the cessation of uterine contractions, administered ergot, in order to restore them. At noon of the same day the os uteri was completely dilated, the fœtal head resting at the brim, but no attempt was made at artificial delivery; at six in the evening she was carried to the *Clinique* in the following condition:—There was general lividity of the surface of the body; the features were contracted, and the radial pulse imperceptible. M. Dubois was called, and at first supposed that the patient laboured under cholera; but, having heard an account of the case, immediately recognized it as an example of rupture of the uterus. On applying the stethoscope the child was found to be dead; forceps might have been applied, but M. Dubois declined to interfere under the circumstances of the case, on the ground that any interference would have hastened the patient's dissolution, and would uselessly compromise the obstetrical art in the eyes of the public, who are always disposed to judge wrongly: the patient died in a few minutes

after. On examining the body after death, an extensive rent was found in the right side of the uterus, reaching from the orifice of the organ to the round ligament, passing through the entire thickness of the substance of the uterus, but leaving its peritoneal tunic quite uninjured. In both of the preceding cases the rupture was spontaneous, and not the result of ill-directed mechanical interference. We must therefore admit, says the reporter of the cases, an organic predisposition to laceration of the uterus, which is probably nothing else than an inflammatory softening of its tissue. In both of the cases, too, the rupture was in the right side of the uterus, instead of in its anterior surface, as it is more generally observed. We agree with the reporter, in thinking that M. Dubois' motive for non-interference, viz. "a fear of public opinion, which is always wrong," is, more especially in one of his reputation and experience, a very ridiculous, and possibly a highly dangerous, guide in practice.—*Monthly Jour. of Med. Science, from Journ de Med. et de Chirurg.*

Prolapsus of the Vagina, Laceration of the Unimpregnated Uterus, and Protrusion of the Uterus.—In the preceding page there has been recorded a case of laceration of the gravid uterus, with protrusion of the intestines through the rent, and the following case is an example of a similar injury in the unimpregnated condition. The patient was 60 years of age, and had borne seven children; she suffered under prolapsus of the vagina, and having never applied for medical advice, nor adopted any remedial measures, the affection proceeded from bad to worse; the sense of weight and dragging in the hypogastric region, the tenesmus, and dysuria became so severe, that she, by degrees, found herself less able to maintain the erect position, and was ultimately compelled to rest her head constantly upon her knees. On the 12th October, M. le Chaptois was called to her assistance; upon entering the room he was struck by the fetid cadaverous odour which exhaled from the bed in which the patient lay, in a state of profound prostration. An enormous mass of small and large intestines had protruded through the uterus, which was torn and dragged down by the mass; the womb was everted, and hung between the thighs like the finger of a glove; near the angle of the right Fallopian tube there was a laceration of nearly four inches in length, which had given passage to the intestinal mass. The patient had, for some hours, been speechless; the pulse was small and weak, and she was, to all appearance, moribund. M. le Chaptois, notwithstanding her desperate condition, having carefully washed and cleansed the viscera returned them with his hand into the pelvic cavity; they were then maintained in their place by the introduction of a sponge into the vagina. During the succeeding night the patient vomited frequently, and suffered from convulsions; but, after the bowels had been freely moved, an amelioration took place, and the case proceeded to a favourable termination.—*Ibid from Ibid.*

On the Constitution and Functions of the Cervix Uteri. By M. Negrier.—The following are the most important conclusions which M. N. draws from his investigations. The superior orifice of the cervix endeavours to contract powerfully the instant that the dilating body, whether the ovum or the fœtal head, has passed out of it; the superior orifice alone may oppose an obstacle to delivery, it alone may incarcerate the placenta, whereas the inferior orifice, when it has been fully and slowly dilated, returns to its ordinary size after a considerable time, and gradually. In females who are delivered for the first time, the orifices of the cervix contract before the walls of its cavity; and in women who have been delivered more than once, the lips of the external orifice close more slowly than the cavity of the cervix; and in all women the parietes of the cervix are thrown into folds from above downwards. These perpendicular folds result from the closure of the superior orifice, and are not entirely effaced even ten days after delivery. In cervical implantation of the placenta, M. N. seems to prefer plugging far before any other mode of treament. —*Ibid, from Arch. Gen. de Med.*

Chinese ideas respecting the Anatomy of the Circulating System.—The heart is figured low in the thorax, is considered a single cavity, and the reservoir of good things; it has little active connection, none that can be traced with the general circulation. From above, the windpipe passes directly into it; while from below, the tube of a second, elective stomach, connected with the first, recipient stomach, by some kind of conduit, enters it at nearly the same point with the windpipe. Short work is thus made with the complicated and mysterious process of assimilation. One vessel proceeds from the heart to the liver, and another descending along the course of the spine, after communication by a broad reservoir-like expansion, with the kidneys, *it is presumed*, terminates in the genitals. There is, besides, a double canal, connecting the heart at a point near its apex, with the tube last noticed. But what all those things mean, and what part, if any, the heart acts in propelling the blood, the professor who was asked to explain what appeared in the plate, failed to show. Chinese notions regarded the circulating system, as on most other subjects, are peculiar to themselves, and differ entirely from those entertained by European physiologists, anterior to the time of Harvey and Servetus. In this, as in other vital actions, they introduce the sexual system. They have some idea of difference between arteries and veins, but what it is, and what offices they assign to each, could not be ascertained.

The arteries are said to be male and female. Of the former, three, belonging to the hand, proceed from it to the head; while three, belonging to the foot, originate in the hand, whence they descend to their proper place. On the other hand, three female arteries proceed from the bowels to the hand, to which they belong; and three, belonging to the foot, originate there, and then proceed to the intestines.

Besides these vessels, there is the pulse artery, which moves with every respiration three inches, and performs its circuit in two minutes. The chief concern of the doctor is the study of this artery, that he may clearly understand, and accurately unfold its manifold meanings; for in so much as he has skill to read its language accurately, by so much is he excellent as a practitioner. From it, besides the temperament of the patient, he deduces the diagnostic character of the disease he is called to treat, after which, having settled the kind and degree of disorder which has arisen among the elements, he sets manfully to work, and boldly promises a cure, knowing, what is not peculiar to China, that the man who promises most in medicine is most followed.

The veins are said to circulate day and night, but it does not appear that they believe the motion to be onward and in a circle: for they say, that having arrived at the end, it again commences where it left off. Nor do they admit that the arteries and veins have any connection; for they allege that all the arteries and veins have their respective cavities, twelve in all, such as the liver and heart, from which they proceed, and corresponding places where they end; and that, throughout the body, there are paths, ducts, and channels, distinct and appropriate to each, so that the blood does not meet with obstruction in its passage, though why it passes, and by what mechanism, does not appear.

The heart is said to be the ruler, from which the spirits proceed; it is also held to be the receptacle of marrow, which comes from the brain, and goes to the reproductive organs. The lungs are vehicles by which the temper is regulated. The liver holds the place of a general, whence proceeds contrivances and orders. The bile acts as umpire, settling disputed points. The spleen performs the part of messenger, and is the fountain of joy—a function not before ascribed to it, but to which it has as good a title as to be considered the seat of ill-humour and despondency. The stomach is the granery of the body, and the governor of the five tastes. The great duct is the promoter of principles, and the operator of changes; the smaller ones being the receptacles of superfluity, where digestion is carried on. The kidneys are the rulers of strength, whence all skill proceeds. The bladder, having no connection with the kidneys, is the general reservoir of the absorbents.—*Wilson's Med. Notes on China.*

Nasty Notices.—A foreigner looking over the English newspapers must think the people for whom they are printed, the nastiest on the face of the earth. No language, however gross, indelicate, offensive, or disgusting, is considered unsuited to the eyes polite which scan the contents of the "usual channels of information." At the head of the columns appears the "doctor's" book-advertisement on costiveness, with all its evils embellished with words and expressions suited to the subject, and to it alone; then the instrument-maker's flourish of syringes, operative vases, fountains, and other delicate contrivances; and at the end, the plumber's announcement of water-closets, stationary and portable. This is no fanciful picture. We see it every day. But

the abomination is not consummated until the fistula-curer closes up the march, and here he is with the Lord Mayor and all his merry men in his train:—

"*Infirmary for Fistula.*—A deputation from the Fistula Infirmary, consisting of Mr. John Masterman, M. P., treasurer, the Rev. Dr. Vivian, chairman of the committee of management, Mr. Frederick Salmon, honorary surgeon, and Mr. William Carter, the secretary of the charity, waited yesterday on the right Hon. the Lord Mayor, to request his lordship's acceptance of the presidency of the infirmary for the ensuing year. The deputation was received by his lordship with the greatest courtesy, who expressed his desire to further the interests of the institution in every possible way, and fixed Monday, April the 19ht, for the anniversary festival of the institution, at which he signified his intention to preside."

The *quid nunc* family of Cockneyland is at present all in an uproar of most amiable indignation against the horrid Irish, who will not starve quietly; and words can scarcely be found sufficiently strong to express the contempt entertained for Hibernian delinquencies; but we challenge the greatest advocate of Saxon refinement to match the above paragraph in Celtic barbarity. Just let us picture to ourselves the Lord Mayor of Dublin seated in state to receive a deputation headed by one of the city members ushering in a fistula-curer to bespeak his lordship's patronage and custom; and soliciting the first municipal officer of the city to "accept the presidency" of his filthy "institution!" Such a thing could not take place amongst us, or if it did, we should not at all events have it thus blazoned forth.—*Dub. Med. Press.*

Lithotrity—Statistics by M. Civiale.—From the year 1836 to 1845, M. Civiale has applied his method in 266 cases, with success in 259 patients, a few of which obtained only partial relief. In seventy-nine instances M. Civiale considered that the operation of crushing presented no chance of success, and refused to operate. Lithotomy was performed on twenty-eight, and seventeen recovered.

The statistics laid before the academy, at various periods, show that 582 patients have been operated upon by the author; and the tables point out distinctly this remarkable fact, that three-fourths of calculous patients who present themselves now-a-days, for treatment, are operated upon by the method of crushing.—*Lon. Med. Times.*

New York Pathological Society, January 27th, 1847.

Dr. Wood exhibited a *polypus uteri* which he had removed by ligature from a woman in whom it had existed for nine years. It was about the size of a Vergaloo pear, and hung by a well defined pedicle from the fundus. Several fibrous tumours were attached to other parts of the uterus, appreciable by the hand externally applied, varying in size from that of a marble to that of the fist. In three days after the application of the ligature, the polypus came away without hæmor-

rhage; it had lost nearly half of its bulk. Confirmatory of his previously expressed opinion, Dr. W. had found this polypus, as he had others, supplied by one large artery in the pedicle; this gave off other small ones. It was difficult to secure arteries after their section in all fibrous tissues, as room, owing to their elasticity, is not given for the hold of the ligature beyond the tenaculum. He had attempted it, unsuccessfully, upon this specimen. Hence the great danger of *excising* these growths, which he considered a bad and hazardous practice. He exhibited an instrument well adapted to the purpose of ligating polypi, and, coinciding with Dr. Montgomery in the belief of the identity of the three forms of uterine fibrous tumours, and his condemnation of the knife, strongly recommended the perusal of his late valuable paper on the subject of this disease. Dr. W. stated further, that he had recently confined a woman, whose child (a female) when five weeks old, weighed two and a quarter pounds. It was born in the seventh month, and for two weeks did not nurse. It is now doing well.

Dr. Van Buren exhibited the parts taken from a patient with *aneurism of the femoral artery, and communication of the artery and vein.* The gentleman was twenty-one; he had been wounded two and a half years ago in an affray, with a pistol ball, which entered below the ant. sup. spinous process of the ilium, traversed the front of the thigh, and came out on the inside of the symphysis, under the skin. At the moment, much hæmorrhage ensued, arrested by pressure. He recovered entirely in six weeks; on getting about, he discovered a pulsating tumour in the middle of the thigh, three inches below Poupart's ligament. When examined, on his arrival here, it was irregular and ill-defined, three or four inches in circumference, and over it, *a very unusually distinct thrill* could be felt. The tumour was in contact with Poupart's ligament. The external iliac artery was tied by Professor Mott on the 16th of December, and on the 22d he died, gangrene having extended over the whole limb, commencing at the foot. The operation was ill borne; severe pain was felt at the moment of tightening the ligature for several minutes, followed by numbness of the whole limb; soon after he had pain and oppression at the heart. Next day there was much agitation, with oppression about the chest and pain in the belly, and the temperature of the limb was eight or nine degrees lower than that of the opposite side. The pulse was never as full as before, after the operation.

Post mortem (which was difficult on account of the state of the parts.) A little lymph upon the peritoneum around the wound, not affecting that of the adjacent intestines. The ligature was applied about one and a quarter inches above the circumflexa and epigastric arteries, and a clot of about an inch in length above it. The artery began to be atheromatous just below Poupart's ligament. A true aneurism communicated with the artery just above the origin of the arteria profunda, a little larger in size than a partridge egg, and of a regular oval shape like a pouch, having a small jug-like neck, and containing coagula formed before the ligature of the artery. It was enveloped by gristly

cellular tissue. Immediately under the sac, and blended with it, was the anterior crural nerve, much larger than natural in appearance, from thickening, probably, of its cellular neurilemma.

The vein along side was healthy, but thickened, and the cellular tissue at this point, infiltrated and indurated. *Just here existed a communication between the vein and artery.* A little cyst of bony shell was attached to the surface of the vein, just where the saphena dips into it.

The case Dr. V. B. believed to be unique; *an aneurismal varix, and a true aneurism* of the femoral artery. The large quantity of indurated cellular tissue above the disease, and the exaggerated thrill gave the idea of a much larger aneurism than really existed. The injury done to the artery had caused disease of its coats and aneurism. There was also decided hypertrophy of the heart, with induration of its tissue; no ossific deposits. Each cavity contained a polypus, quite white and apparently formed before death. Dr. V. B. said that a patient operated on by Mr. Ramsden, with subclavian aneurism, went on well for some days, with slight oppression of the heart, and died suddenly. A polypus existed in the descending vena cava, depending into the right auricle, which acted as a valve and caused death. Hence, he inferred, that there might be something in the ligating of large arteries, which led to this condition. The heart, in Dr. M.'s patient, beat very irregularly after the operation and intermitted.—*N. Y. Annalist.*

A Notice of the Grayson Springs. By Lunsford P. Yandell, M. D.—The present proprietor of the Grayson Springs, in the summer of 1833, learning that quite a number of infirm people had gone to them in the woods, and were encamped about them in tents, was induced to purchase and improve them. It seems that, many years ago, they acquired, by some accident, a reputation for curative virtues, and this they have continued to enjoy. On a visit to the springs last summer, I met with a large company of invalids, and learned from many of them that they had not been disappointed in their hopes of renovated health from the use of the waters. I saw some lodged in hired cottages, near the springs, who were not able to pay for board at a tavern, and had brought with them their beds, provisions, and cooking utensils—a fact which testifies to the strong popular faith in the efficacy of these springs.

The springs, issuing within an acre of ground, are five in number, and, although differing in temperature, and slightly in taste, contain essentially the same ingredients. The Rock spring is the coldest; the Stump spring is so warm as to be unpalatable, and its water is chiefly used to supply the bath-house. The water of the Centre, Moreman, and McAtee springs has a pleasant temperature. Of these the latter is perhaps the favorite fountain. It takes its name from an early visiter, a lady, whose health is said to have been restored by the use of its waters.

The following are the ingredients found in these springs:

Sulphuretted hydrogen,
Carbonic acid,
Carbonate of magnesia,
Carbonate of lime,
Carbonate of iron,
Sulphate of magnesia,
Sulphate of lime.

Sulphuretted hydrogen is the most characteristic constituent of the waters, and, with the carbonic acid, renders them light. The first effect of drinking them is an increase of perspiration; the bowels are generally gently moved, and the appetite and powers of digestion improved. To generalize, the action of the Grayson springs may be said to be gently tonic, laxative, and alterative.

These springs occur in a different formation from the other noted mineral springs of Kentucky; as they also differ materially from most of them in their constitution. Sulphate of magnesia is the most prominent ingredient in the Harrodsburg springs, which is recognised by its bitter taste; and although the same article is found in the Grayson springs it is in too minute a quantity to affect the taste of the water, which is sweetish. The Blue, Bigbone, and Drennon's Licks, the Olympian and Paroquet springs, all abound in common salt, which is absent from the waters of Grayson. They all, except the Olympian, occur in the Blue Limestone, the oldest of our fossiliferous rocks; the Grayson springs are found in the Carboniferous limestone, immediately below the coal series. The stratum from which they issue is the same in which the Mammoth Cave occurs,—the *Pentremital* or uppermost layer of the most recent of our limestone rocks. In this rock, in the immediate vicinity of the springs, Pentremites, Archimides, and many new and most beautiful species of Encrinites, are found. The locality is one of exceeding interest to the geologist.

Louisville, Jan. 26th, 1847. *Western Journal.*

Western Schools.—From the numerous medical schools in the Valley of the Lakes and Mississippi, we have received the official reports of only two. The Medical Department of the Western Reserve College, established three or four years ago at Cleveland, Ohio, gives in its catalogue two hundred and sixteen names; which is a remarkable growth. The Medical College, of Ohio, at Cincinnati, has reported to the Legislature one hundred and seventy, as its number.

The other Ohio school, Willoughby University, which for ten or twelve years has been established at a village near Cleveland, is, as we perceive, by an act of the Legislature, to be transferred to Columbus, the seat of government of that State. Its Faculty will, as one of the Professors lately informed us, be there re-organised, when we shall give the names of its professors. We do not know the number of its present class.—*Ibid.*

THE

MEDICAL EXAMINER

AND

RECORD OF MEDICAL SCIENCE.

NEW SERIES.—No. XXVIII.—APRIL, 1847.

ORIGINAL COMMUNICATIONS.

Artificially Shortened Funis—with Rupture before Delivery.

Read before the Northern Medical Association of Philadelphia, January 21st, 1847. By Wilson Jewell, M. D.

Numerous causes have been assigned by obstetricians for protracted and difficult labour. Among others will be found, "a short funis," and "one or more coils of the cord around the neck of the child." The first of these may be viewed as a natural or an absolute, the latter, as an accidental or relative cause for delay in the birth. A cord short enough to retard delivery, could in no instance be coiled around the neck of the child, and a cord of a length sufficient to enable the child to pass through a loop once or oftener, could be no hindrance to the free exit of the fœtus without this occurrence, hence, these may be considered and treated of, as separate and distinct causes for tedious labour.

A shortened funis, either natural or accidental is so seldom the cause of tedious labour, or so rarely demands artificial aid in the progress of delivery, that some authors have not classed it among the causes for complicated labour, while others lay but slight stress upon it, deeming it of too little importance to require a special section for its consideration. Yet it does occur, though but rarely, and according to Moreau is one of the causes in the fœtus for rendering natural labour artificial—is an obstacle to parturition, exposing the mother to accidents, and endangering the life of the child.

Collins, in his practical treatise on midwifery, makes no allusion whatever to a naturally shortened funis, as though it never occurred, and has only a bare reference to an artificial shortening of the cord, under the head of natural labours, where he directs that the cord when around the neck should be brought over the head or passed back over the shoulders—for fear that the cord might act as a ligature, pressing on the neck of the child and checking the circulation—or injure the mother by dragging away the placenta, causing hemorrhage, or by inverting the uterus; but he gives no certain directions how to proceed in the event of not being able to remove the cord, either by passing it over the head or back over the shoulders. Nor can I find, that in the 16,654 births of which he gives the result, there is one instance recorded of shortened funis.

Baudelocque, of whom our American Baudelocque, the lamented Dewees, said he held himself indebted for nearly all he knew on midwifery—Baudelocque, whose genius and well tried experience none will doubt,—holds the following sentiment on this point of practice, which he places under the head of causes of preternatural labour.

"It is generally supposed that the cord by its shortness, or frequent windings on the child, opposes obstacles to delivering; such as keeping the head back, or if it allows it to advance during pain, it makes it recede immediately after; thus mistaking the reaction of the perineum and bones of the cranium, for the action of the cord. This will point out the futility of the advice of some authors who recommend the cutting of the cord, &c."

Dewees follows in this instance, very closely his master Baudelocque, but goes a little further. In his section on "Too short a cord," he says, "I shall not positively deny, that too short a cord, either artificial or natural will interrupt a natural labour, but I must say, I have never seen an instance; and also that I entertain strong doubts of its possibility."

Rigby, in his valuable work on obstetrics, gives practical directions in case of an accidental short cord, and its acting as a ligature on the neck of the child, and where it cannot be removed, to divide it—but adds, "we believe that this is rarely if ever necessary; for in proportion as the child advances, so does the fundus descend, and thus relieves, in some measure, the tension to which the cord is exposed." Under the head of difficult labours from faulty condition of the parts which belong to the child, he admits that "the umbilical cord may obstruct labour, by either being too short, or rendered so from being twisted round some part of the child," but on the very next page, as though he had forgotten his admission which I have just quoted, he says, "we quite agree with Professor Naegle, that unusual shortness of

the cord can rarely if ever retards labour," and then again on the following page he adverts to the twisting of the cord around the neck, and adds, that it may not only retard labour, but destroy the child, by preventing the free return of blood from the head, either before the birth, or during the actual process of labour.

He also cites La Motte's and Burton's cases, where it became necessary in one case to cut the cord, which was done before the head was expelled from the os externum, in order to relieve the mother from danger and save the life of the child.

The cautious Blundell, who is certainly a very discriminating and safe practitioner, treats this whole subject very loosely. On page 111,* he makes mention of the cord being coiled round the neck six or seven times, and gives directions about removing it, but closes his remarks by saying, "a better method is to leave the cord around the neck, until the body be born, when it may be disentangled with facility." Under the variety of laborious labour, page 312, the same author doubts whether brevity of the cord gives rise to laborious labours, and thinks the shortness of the cord never makes itself felt, until after the head has escaped the vagina.

Ramsbotham in his practical work on midwifery, does not cite a case, in all his experience, of a short funis either natural or artificial, becoming the cause of protracted or dangerous labour involving either mother or child.

Lee, on the other hand, p. 240,* says that a short cord is the cause of delay, and cites Smellie's case, where the funis was three times around the neck, and where labour was protracted several days. He also says, unequivocally that from shortness of the umbilical cord without surrounding the neck of the child, it has been torn during the expulsion of the trunk and lower extremities. When the cord is around the neck of the child, he says the labour is sometimes protracted, and the head of the child retracted or drawn up after every pain, and that the cord has to be tied and divided before the child's body can be born.

Burns says, the cord may be on the stretch, but it never happens that it is torn, p. 79. vol. 2.† When the head is born with the cord around the neck he says, that some advise the cord to be cut, but his opinion is, that such a course "is rarely necessary, for the child may be born, though the cord remain about the neck."

The late Dr. James of this city, was of opinion, that retraction of the head was rarely caused by shortening of the cord or its being coiled around the neck—but was occasioned by rigidity of reaction of the external parts of the mother.

*Edition Select Medical Library.
†James' Burns, Edition, 1817.

Denman, p. 326, notices delay and difficulty, where the head has been expelled and the funis twisted round the neck, and he says, "lest the placenta should be separated, or the body of the child be hindered from advancing till it suffers detriment, or is brought into absolute danger," the cord must be brought over the head. If this cannot be done, slide the funis back over the shoulders; if either of these intentions cannot be accomplished without violence, they must be omitted, nevertheless the child will be usually expelled, if we wait for the return of a few pains, which we may safely do without any other inconvenience than some increased distention of the perineum. Where, however, the child is retarded a long time, the funis may be divided before it is expelled.

Professor Meigs, in his excellent manual, "The Philadelphia Practice of Midwifery," designed principally for students, but containing many choice reflections, gives similar directions as those authors already quoted, in cases where the cord is around the neck of the child—but says, if "the child seems to be detained by the tightness of the cord, as does rarely happen, or in danger from the compression of its jugular veins, the funis may be cut with the scissors and tied after the delivery."

The umbilical cord varies in length; while it is usually found about the length of the fœtus, say from eighteen to twenty inches, it has been found as long as eighty-four inches by Desormeaux, and the shortest one known, was only two inches in length. This occurred in the General Lying-in-Hospital in London, where after two or three violent pains, the child was suddenly expelled and the cord was found ruptured two inches from its navel. The other end of the funis was sought for, but could not be found; on removing the placenta from the uterus, it was discovered that the cord had been ruptured at its very insertion.

The shortening of the umbilical cord, by being coiled around the neck of the child, is of frequent occurrence, and according to some authors, takes place as often as once in five or six cases. I agree in opinion with those writers whom I have quoted, that the cases of difficulty arising from such a shortening are rare. But that they do occur, that they may cause delay, retard delivery, endanger the life of the child, and that the cord may be ruptured before the delivery of the body of the child, I would present the following case in point, from my memorandum of cases.

On the twentieth day of August, 1846, I was sent for about 12, M., to visit Mrs. R. in labour with her fifth child. As her previous accouchement had been remarkably quick, and as I had been informed, so were her former ones, I made all haste and was soon at her bedside, where I found her in strong pains. An

examination per vaginam, led at once to the opinion that I was "just in time" to receive the child, as the head was pressing forcibly during the pain against the perineum. I was, however, doomed to experience disappointment in my sanguine hope of a speedy delivery and a short detention. As the pain subsided, the head receded quite high up, and remained there, until the following pain brought it down once more to the "crowning" point of labour. Again and again, for many successive pains, I was obliged to contend with this alternate advancing and receding of the head, until the clock struck two, and until my patience was wearied, and my patient and her friends wondered at the delay.

Although unable to diagnosticate by the touch without the introduction of the hand, yet I surmised and even communicated my suspicions as to the cause of the impediment, to be, either a natural or artificial shortening of the funis. I was led to this opinion, because there was a normal conformation of the pelvis of the mother and the fœtal head of the child, because the soft parts were fully and sufficiently relaxed for every necessary purpose, because the uterine contractions were vigorous and frequent, and because the head was in the first position of Baudelocque, being the most favorable for the termination of labour without the interposition of art, unless there existed some mal-conformation of the body of the fœtus, or, as I suspected in the present case, either an artificial or natural shortening of the umbilical cord.

For more than two hours I waited and watched anxiously the result. At length a powerful and continued effort of the womb expelled the head of the child beyond the vulva, but when the uterine action had ceased, the head remained firmly wedged against the os externum.

The appearance of the child at this stage of the birth, indicated immediate strangulation, unless relief could be afforded, as I now discovered by passing my finger around the neck, that it was closely compressed by being encircled with two turns of the cord, which by this arrangement, was artificially shortened. The face was now assuming a very dark purple colour from the accumulation of blood in the return vessels, in consequence of the obstruction of the jugular veins. There was no time to lose. Accordingly, I made an effort to remove the cord by bringing down a loop and passing it over the head, but it was drawn so tight that I found it difficult even to insert my finger beneath it, much less to bring down a portion and slip it over the head or pass it back over the shoulders, as various authors direct.

Thus situated, I was in momentary fear of witnessing those spasmodic jerks, which are so clearly indicative of the death of the fœtus, when another pain returned. At this crisis, I determin-

ed to pass my finger beneath that portion of the cord which was coiled around the neck, not only to prevent an increase of pressure on the circulation of the jugular vessels, but to separate the cord and thus relieve the extreme danger, when suddenly the cord gave way, and almost at the same moment of time the child was precipitated into the world and lay at the breech of the mother. The bleeding from the ruptured umbilical extremity of the funis soon relieved the apoplectic symptoms. I put a ligature on the umbilical extremity of the cord, which, singular to relate, was ruptured about two inches from the navel. In a very few minutes the child breathed and cried freely, and I handed to the nurse a fine healthy boy.

The placenta came away in season, and from that hour the mother and child did well.

There are two points in the above case of "artificially shortened funis with rupture before delivery," which may afford us subjects for practical reflection.

1. Can a shortened funis obstruct delivery?
2. Would it endanger the life of the mother or child?

All authors to whom I have had access, agree that one or more coils of the umbilical cord around the neck of the fœtus is a common occurrence, happening as often as once in every six or seven labours; but that it ever changes a natural into a preternatural labour, they are not so well agreed.

Baudelocque, Dewees, James, Burns and Blundell, do not believe that a short cord ever protracts or retards labour, while on the other hand, Smellie, Rigby, Lee, Moreau, Denman and Meigs are of opinion that it may produce delay, though rarely, and each of them give some directions how to proceed when it does occur.

I fully agree in opinion with these last named gentlemen, and although my case was not protracted for several days as was that of Smellie's, still it does not change the principle, nor my opinion, that the case of Mrs. R. was hindered for two hours, and perhaps longer, by an artificially shortened funis.

Would a shortened funis endanger the life of the mother or child?

Here I have not the least hesitation in pronouncing judgment in the affirmative, and am supported in my opinion by Baudelocque, Lee, Moreau and others.

In the expulsion of the fœtus, the violence of the dragging pains may tear the placenta from the womb, and expose the mother to a destructive flooding, or produce an inversion of that organ, or the pressure of the cord around the neck of the child may retard the free circulation of the blood in the brain, producing asphyxia, apoplexy and death, or should the cord rupture and assistance not be at hand, the child might perish from

the loss of blood. On this point there can be but little difference of opinion. Almost every author I have consulted, gives short directions for the removal of the cord from the neck of the child, and several of them recommend the cutting of it before the body shall be delivered, in order to protect its life.

Who would be willing to follow the recommendation of Blundell, and believe with him that "a better method" is to leave the cord around the neck until the body of the child is born, rather than remove it or cut it, when it was evident from the livid suffusion of the countenance of the half-born fœtus, that the circulation was impeded and death threatening? It is in such a case that procrastination would be attended with danger. It is here, that a "meddlesome midwifery," to employ in part the language of this fanciful writer, would be proper, rather than trust the case in the hands of that "excellent accoucheur in natural labour—Nature, the mother of us all."

The case I have presented is one of interest, and not only rare in its occurrence, but still more novel in its character; for as far as my researches have extended, I find no such instance on record. Baudelocque believes that it is possible for a cord, if short, to be ruptured before delivery; and Rigby says it has taken place, and he furnishes a reference in the London Med. and Surg. Journ. for May, 1835, p. 426, of a case which happened in the London General Hospital—but it was one of natural shortening of the cord—which was only two inches in length, and was ruptured before the child could be born. La Motte's cases and Burton's cases, as cited by Rigby, were artificial shortenings, but in neither of these did a rupture take place spontaneously before delivery. Burton ruptured both of his, and La Motte, who had three cases, cut one with his scissors, dragged another away with the placenta, and the third was delivered with little else than force.

Retention of Urine, a Sequela of Scarlatina, successfully treated with Strychnia. By Geo. L. Upshur, M. D.

W. H——, a delicate child, æt. 7, of a nervous temperament and strumous diathesis, was attacked January 21st with ordinary symptoms of catarrh, accompanied by considerable febrile excitement, though he did not feel sufficiently indisposed to go to bed. On the 22d, he complained a little of sore throat; had not been exposed to scarlatina, but there was a case of well marked rubeola two doors off. Fever continued moderate until the night of the 24th, when it became higher, and the catarrhal symptoms were entirely superseded by the sore throat. I was called to

see him on the morning of the 25th, and found his condition as follows: Face flushed; throat red, swollen, and painful; headache; tongue furred white, with papillæ projecting; constant nausea and vomiting; and over the whole surface of the body there was an eruption partaking of the character of the rash of scarlatina and measles combined, but not sufficiently distinct to render the diagnosis certain; there was no cough or suffusion of the eyes. *Prescription.*—Warm mustard pediluvium. ℞. Pulv. Hyd. Chlor. Mit. gr. viii, Pulv. Ipecac. gr. iv, M. Pil. 4.—S., one every two hours. 26th. Rash abundant, and evidently that of scarlatina; fever moderate; thirst; great tenderness of the surface where the eruption is found; bowels were moved during the night; no nausea; thirst less painful. The patient continued in this condition without other treatment than a dose of Ol. Ricini, until the 29th, when the throat being more painful, I prescribed an emetic of Ipecac. and a gargle made of infusion of carrots.

From this time the patient commenced to convalesce, and I should not have bestowed further attention upon the case, but for the illness of another child in the same house. On the 9th of February, he complained to his mother of pain about the neck of the bladder, and inability to urinate. I was requested to see him in the afternoon of the 10th. Found him feverish, the bladder considerably distended, and suffering with headache. Had passed little or no urine since early in the morning. Ordered him to be put in a warm bath, and to take an ounce of caster oil and forty drops of laudanum immediately.

11th. Bladder very much distended; passed a restless night; bowels were moved twice, but no urine came away during the night; this morning there is stylicidium. Introduced the catheter, the operation being somewhat difficult from the smallness of the parts, and the existence of a partial congenital phymosis. There were three spasmodic strictures, situated about half an inch apart, the first one being about an inch from the external orifice of the urethra. By keeping the point of the catheter steadily pressed upon the seats of stricture, in the course of ten minutes they gave way and the instrument entered the bladder. About eight ounces of urine were drawn off; when it ceased to flow, the catheter being clogged with mucous. After trying in vain to clear it with the wire staff, I was obliged to withdraw it, and he refused to permit me to introduce it again. The urine was turbid, and of the odour of asparagus.

12th. Passed no urine during the night, and has slept none; considerable fever and a haggard countenance. Ordered successively, a warm bath; tobacco leaf steeped in alcohol to the perineum; nauseating doses of tartar emetic: and last an opiate enema. All of these means failing to relieve, resorted again to

the catheter, being obliged to have the patient forcibly held. Drew off about a quart of urine with entire relief.

13th. Symptoms as yesterday. Ordered a cathartic and large doses of the Tr. Ferri Chlor. Passed no urine during the day, and in the evening introduced the catheter.

14th. Could not get the catheter more than two inches in the urethra, the stricture refusing to yield though pressed upon for twenty minutes. Ordered forty drops of laudanum, and repeat it if necessary.

15th. Bladder much distended, although the urine has been dribbling away all night. Again tried the catheter. After holding it against the stricture a few minutes, the spasm suddenly gave way, and a stream of urine forcibly ejected the instrument from the urethra; he passed about half a pint, when it suddenly stopped, causing great pain. Ordered the following:

℞. Strychniæ, gr. ss.
Pulv. Rhei, gr. xx.,
M. Pil. 8.—S. One every five hours.

16th. Has taken four pills, and passed during the night about half a pint of urine. Complains of pain in the epigastrium; there is some twitching of the extremities. Continue the pills every four hours. In the evening he was free from fever and had urinated tolerably freely during the day.

17th. Passes his urine better, but there is still some pain and spasm about the neck of the bladder. Continue treatment. *Evening.* Twitching better marked and very general; observed it even in the occipito-frontalis muscle. Urinates with little or no difficulty. Discontinue medicine.

18th. Bowels moved during the night, and urine voided as in health. From this time he convalesced rapidly, and is now (March 5th) perfectly well.

Remarks. No writer upon scarlatina speaks of retention of urine as one of its sequelæ, and I am disposed to look upon its occurrence in this instance as a coincidence instead of a sequence. The child was of a nervous, irritable temperament, and in all probability any febrile action continued for several days would have been followed by the same effect. Be this as it may, however, retention of urine, under any circumstances, may justly be considered a distressing and serious complaint, for the relief of which a variety of remedies have, from time to time, been suggested.

Mr. Holbrook (*Med. Chir. Rev., March*, 1824) recommends the use of active cathartics, and reports several cases of cure from their employment. This treatment is based upon the well-known fact that the rectum is seldom or never evacuated without a simultaneous emptying of the bladder.

M. Gerard (*Jour. des Connais. Med. Chir., May*, 1835) successfully treated four cases of retention of urine by frictions with ointment of belladonna over the hypogastrium. Before resorting to this treatment, the warm bath, opiates, venesection, leeches and anodyne enemata were tried without success. The ointment was made by rubbing up ʒij. of the Ext. Belladon. with ʒj. of lard.

Dr. Somervail (*Am. Jour. Med. Sci.*, Vol. xvi, p. 250) relates a case cured by muriate of ammonia, in doses of five grains every hour. He thinks the retention was caused by a large dose of solution of morphia, which the patient had taken for the relief of violent pain.

The only case I can find recorded in which strychnia has been employed for retention of urine, is given by Dr. Cory (*Med. Chir. Rev., July*, 1839.) The patient was left, after labour with her first child, with total loss of power on the part of the bladder. It was necessary, for her relief, to use the catheter twice a day for three weeks. She was ordered to take one-sixteenth of a grain of strychnia three times a day. "I was, I must confess," says the author," "somewhat surprised to find my patient, after taking the second dose, pass her urine *sud sponte*, and with ease and comfort to herself." The medicine was continued until about a grain had been taken, when the cure was complete. The author does not mention the use of any other means except the catheter.

Ergot, muriated tincture of iron and cantharides, have been highly extolled in the treatment of retention of urine. I have never given any of these except the Tr. Chlor. Fer., which failed in the case above reported, although the trial was a fair one. I should be more disposed to rely, in future, upon the belladonna ointment or the strychnia. The efficacy of these remedies, however, depends, of course, upon the cause of the affection. In retention of urine, so often found in old men, and which is dependent upon enlargement of the prostate gland, I presume they would not benefit at all. But where the retention is dependent upon spasmodic stricture of the urethra, or paralysis of the fundus of the bladder, or upon both these conditions, I feel persuaded that but a very small proportion of such cases would refuse to yield to this treatment.

Norfolk, (*Va.*,) March 5th, 1847.

On the Effects of large doses of the Sulphate of Quinine. By Wm. Alexander Thom, M. D., of Eastville, Northampton County, Virginia.

To the Editor of the Medical Examiner.

In these days of ultraism and exclusiveness in medical matters, I have thought it might not be amiss to report the following cases, illustrative of some of the effects of very large and frequently repeated doses of quinine. I regret that the imperfect notes of the cases preserved, will permit my giving little more than an outline of the symptoms and treatment; enough, however, remains to show that the quinine was the direct cause of the unpleasant symptoms occurring at the conclusion of the treatment; and although all the cases ultimately did well, they still warn us of the dangers attending the indiscriminate administration of this most valuable, but much abused agent. All the cases occurred in the course of the past fall, and three out of four in children of from six to eight years of age, and all were ill with some modification of miasmatic fever, assuming the ordinary remittent or congestive form distinguishing our autumnal diseases. The fourth case will be found to furnish another instance of amaurosis produced by quinine, and affords additional evidence of the correctness of Dr. McLean's opinion on this subject, as expressed in an article transferred to the "Record" of the *Examiner* for February of this year. This was the first case of the kind which had ever come under my observation, in which the effect so immediately followed the administration of the remedy; and I was somewhat at a loss whether to ascribe it to this or not. Dr. McLean's paper, however, has satisfied me on this point.

The phenomena presented by all the cases are explicable only on the idea that quinine exerts a powerfully sedative action on the nervous system. The symptoms manifested,—though in a less degree,—were not unlike those exhibited by some constitutions under the peculiar action of mercury, and described by Mr. Pearson as *mercurial erethism.* Smaller doses of the medicine had, in all the cases, been tried in vain, and I am satisfied that nothing but very large and frequently repeated doses, could have saved the lives of two of them. It will be seen, however, that in most of the cases the quantity of quinine taken was not *inordinately* great.

Case 1. A little girl, æt. 7, with remittent of the ordinary form, exacerbation occurring daily about noon. When I saw her, the remission had just begun; I ordered two grains of quinine in solution every hour until she had taken twelve grains; afterwards a cathartic of sulphate of potassa and rhubarb. The next day her fever recurred at the usual time as high as ever. *Pre-*

scription.—℞. Hydrarg. chlor. mit. gr. vj., pulv. ipecac. gr. iij. M. Div. in chart. 6.—S. One every two hours; and afterwards, as the paroxysm was expected in four hours, to take five grains of quinine, and repeat it in an hour. She took ten grains; fever rose as usual. At the next remission I ordered her to have sixteen grains of quinine at two doses, with an interval of two hours. When the next paroxysm was expected, I found my patient free from fever, but with a quick, rather weak and thready pulse, mind slow, tongue tremulous, skin cool and moist. All these symptoms subsided entirely in less than twenty-four hours, and she has never had a fever since.

Case 2. Negro boy, æt. 6 or 7, ill with severe remittent fever with powerful determination to the brain, accompanied by a high grade of arterial excitement. I bled him, and ordered a solution of nitrate of potassa and tartar emetic, as he had been purged previously to my seeing him. An indistinct remission occurred for a short time every morning; as soon as this came on, ordered three grains of quinine every hour. He took only six grains when an exacerbation of fever took place, with congestion of liver and stomach. *Prescription.*—℞. Hydrarg. chlor. mit. gr. viii., pulv. ipecac. gr. iv. M. Div. in chart. 4.—S., one every two hours. He took all the powders, which acted gently on the bowels and produced a more perfect remission. Ordered five grains each of quinine and rhubarb, and repeat it in an hour. Soon after the last dose was exhibited, reaction again came on violently, attended with great heat of the skin, thirst, dry tongue, and pulse somewhat tense and irritable, but with little force or fulness. By the use of febrifuge medicines this condition yielded to a partial remission, and I ordered eight grains of quinine, to be repeated in an hour. At my next visit I found my patient without fever, with a cool and moist skin, small, quick and thready pulse, tremulous tongue, and rather torpid intellect. These symptoms soon subsided, and he had a rapid convalescence.

Case 3. Attended Mrs. M. æt. about 35, in consultation with the late Dr. John Ker; had been sick about ten days with an obstinate, but not very violent attack of remittent fever; she had previously taken quinine in small doses, been purged, blistered, taken mercury, &c. We ordered quinine in ten grain doses, at intervals of two hours; she took twenty grains when her fever rose, having previously to this complained of noises in her ears &c., from the use of the medicine. During the next remission she took thirty grains of quinine in three doses. That night we found our patient exhibiting such symptoms of prostration as obliged us to use strong stimulants for her relief. Her pulse was

small, thready and weak, skin cool and clammy, much nausea, and mind torpid. After these were relieved, she began to recover slowly, though for some days she had occasional returns of fever.

Case 4. Attended George, about 8 years old, in consultation with Dr. Bagwell of this county. The case was a very severe remittent fever, accompanied by violent congestion of the stomach. He had been previously purged, blistered, &c., and as soon as a partial remission occurred we recommenced giving quinine in five grain doses, repeated every two hours. This was continued during two remissions without any appreciable effect, when Dr. B., who remained with the patient, increased the dose and shortened the interval. The quantity taken in three days is not accurately known, but I should think was not much less than two scruples. As soon as the constitutional effects of the medicine were induced, the disease yielded; but dilatation of the pupil, insensibility to light, and almost total loss of vision followed. The amaurotic condition slowly improved without remedies, and he is now perfectly restored.

I am informed by a physician of this place, that a case similar to some of the above occurred in his family in the course of last fall. A young lady was so prostrated by taking about 20 grains of quinine in two doses, as to require artificial heat to the surface and strong stimulants to restore her. The symptoms were similar to those of the three first cases recorded above.

Eastville, Northampton, Co. (*Va.*) *Feb.* 1847.

To the Editor of the Medical Examiner.

I have recently observed the evolution of electricity, under circumstances with which I do not know that it has been heretofore noticed.

Standing before a brisk coal fire, and under a large glass chandelier furnished with gas, I was, with other persons in the room, making remarks upon the latter. In the course of these, I touched a tube leading to one of the burners, when there ensued a spark audible to all in the room, and distinctly felt by myself. This was repeated several times by myself as well as the other persons, and many sparks were elicited.

At first I thought that there might be some connexion between the electricity and the combustion of gas, but a moment's reflection convinced me, that the metallic connexion of the burner with the ground rendered this impossible.

It has since occurred to me, that the electricity was generated upon my own person by the friction of my clothes, and that being insulated by the carpet upon which I was standing, I was

in the category of the electrical cylinder with the insutedla cushion, which (i. e., the cushion) gives off negative electricity. I had not however the means at hand for testing this.

If this be not the true explanation of the phenomenon, perhaps yourself or some one of your correspondents may be able to furnish it.

March, 1847. A. W.

To the Editor of the Medical Examiner.

Dear Dr.—In my communication in the last No. of the Med. Examiner, on Wounds from Fire-arms without Ball, the 2d Experiment is thus reported: "Distance six inches, parts covered as before, clothes lacerated, wad lodged one inch and a half below the surface."

This is a material error; it should read, *one half inch* below the surface; and as the experiment may possibly be referred to in future medico-legal inquiries and criminal prosecutions, thou wilt oblige me by giving this correction in the next number of the Examiner.

Respectfully and truly, thy friend,
Paul Swift.

Philadelphia, 3d mo. 11th, 1847.

BIBLIOGRAPHICAL NOTICES.

A Dictionary of Practical Medicine: comprising General Pathology, the Nature and Treatment of Diseases, Morbid Structures, and the Disorders especially incidental to Climates, to the Sex, and to the different Epochs of Life; with numerous prescriptions for the Medicines recommended, a classification of Diseases according to pathological principles, a copious Biography, with references, and an appendix of approved Formulæ: the whole forming a Library of Pathology and Practical Medicine, and a Digest of Medical Literature. By James Copland, M. D., F. R. S., Fellow of the Royal College of Physicians; Honorary Member of the American Philosophical Society, &c. Part XI. London: 1847.

Another part of this valuable Dictionary, which "drags its slow length along," has just reached us from England; com-

prising the remainder of the article on "*hæmagastric pestilence,*" (yellow fever,) *septic or glandular pestilence* [a bad name] or plague; *protection from pestilences; phlegmasia alba dolens; Pityriasis* and *Diseases of the pleura,* (in part.) It bears all the wonted characteristics of the Author's ability and industry; but exhibits less freedom from emotion, and more unilateral prepossessions than many—perhaps any—of its predecessors. We notice it especially to draw the attention of the able American editor to the exceptionable tone, and imperfect and unsatisfactory exposition of the different views advocated on the great question of communicability of yellow fever; and to the general neglect of facts and opinions entertained on the subject on this side of the Atlantic, except where they accord with those of the author,—who is an ultra-contagionist. The tone in which he supports his views may be appreciated by the following extract:

"It cannot be denied by any one who has attended to the subject of quarantine, especially as it has been agitated in recent times, and with a due knowledge of the influence which the ruling passion—the desire of amassing wealth—exerts upon all the more generous and social emotions of the mind, that the restrictions imposed upon trade, arising out of precautions against the introduction of pestilential infections, have been the chief causes, directly or indirectly, producing the opposition to the doctrine of the infectious properties of pestilences; and that all that has been written to disprove this doctrine—and written with no small virulence by some—has not proceeded from a firm conviction of the justice of the cause espoused, but are either special pleadings subservient to sordid purposes, and to the gratification of disappointed feelings or of private resentments, or the outpourings of minds teeming with mistaken views, arising out of imperfect observation and hastily formed opinions, and excited by a desire of acquiring notoriety in a contest involving the interests of the whole community." p. 152.

Nothing can well be more objectionable than the tone of the above paragraph, as applied to a matter of scientific investigation and discussion. In this country, the mass of observers have arrived at conclusions diametrically opposed to those of the Author; and if they were to forget proprieties, they might with as much foundation hurl back the charges of interestedness, &c., upon him.

His next paragraph in continuation of the subject is not less objectionable.

"Let any one altogether unprejudiced as to the infectious or contagious properties of pestilential maladies, attentively peruse most of what has been written respecting them in this and in other countries, carefully examine the evidence adduced before committees of the House of Commons, or in other places, and critically weigh the import and truth of the conclusions arrived at by commissions sent to investigate facts on the spots of their occurrence, and the various circumstances connected with the facts adduced—let any one who possesses sound common sense, with some share of science, but who is at the same time entirely free from the undue influence of prejudice, of temper and of interest, enquire into the matter—and I cannot believe that he can arrive at a different conclusion from that to which I have arrived, after the best attention I have been able to bestow upon this most important and much discussed subject. Whoever may enter upon this very unpleasant investigation, with these moderate qualifications, which, however necessary, are quite sufficient to the formation of just conclusions respecting it, will be surprised to find that, amongst members of a learned profession, so much ignorance should be displayed in the literary character of some of these writings, in the scientific and professional execution of others, and in the illogical inferences of many of them. The duly qualified and candid investigator will detect statements made without proof, facts assumed without evidence, and supposititious agents believed in as real existences, and these made the bases of reasonings altogether inconclusive even as regards the conduct of the argument. He will find things, facts and diseases dissimilar from one another, and presenting no connection either as to nature or to sequence, viewed as identical with each other. He will detect the suppression of important facts and circumstances, and an undue prominence given to others of a doubtful character. He will remark the imputation of motives which did not exist, and ignorance of those which influenced, if they did not impel the writers. He will observe the precipitancy with which the young, the inexperienced and the ignorant, have rushed into print, and attacked with disgusting flippancy and intemperance much abler and better informed writers. In every medical periodical existing during the late war, he will find accounts of a disease never seen by the describers, their own mistakes, proceeding from profound ignorance of the name and nature of the malady seen by them, serving as the basis of their lucubrations and their arguments. And he will, moreover, be grieved to remark the opinions of learned and experienced men

either misrepresented or impugned in jejune and paltry performances, evincing a most remarkable ignorance of the language in which they are written, and a still greater ignorance of that from which they profusely and inappropriately quote. In thus attempting to reach the pure spring of truth at the bottom of the deep code of research, he will have to penetrate not only through the rubbish thrown in by unfaithful, by mistaken, and by ignorant inquirers, but also through the accumulated filth of uncandid and intemperate controversy."

This is a strange exordium for one whose mind has been made up on one side; and who is assuredly most sparing in his references to testimony on the opposite view of the question,—a view, too, which is embraced on this side of the Atlantic by most of those—and many of them highly distinguished in their profession—who had ample opportunities for investigating the whole matter during the prevalence of yellow fever epidemics, in Philadelphia more especially; not one of whom—we are persuaded—was in the slightest degree swayed by the unworthy motives ascribed to supporters of that side of the question by the author of the article before us.

What greater intolerance could they have exhibited than that which is comprised in the above extract, or in the following?

"The opinions of several physicians are adduced by Dr. Bancroft in favour of the non-infectious nature of this pestilence; but upon referring to them, it will be found that they actually support a very opposite doctrine; and that their ideas, as to a non-infectious character, had reference entirely to the remittent endemics of which they were treating, and not to epidemic yellow fever—a piece of sophistry of the most dishonest and contemptible kind."

We hope that the American Editor of the Dictionary—Dr. Lee—will be full in his citations of authorities on both sides of this vexed question, in order that the article may be truly cyclopædiac in its character, and more worthy of companionship with the many admirable essays contained in the work.

It is long since Part X appeared; and if the remaining parts are as tardy in presenting themselves, it must be many years before the Dictionary is completed.

Cours de Microscopie Complémentaire des Etudes Médicales Anatomie Microscopique et Physiologie des Fluides de l'economie. Atlas exécuté d'après Nature au Microscope Daguerréotype. Par M. Donné, Docteur en Médecine, ex-chef de Clinique de la Faculté de Paris, Professeur particulier de Microscopie, &c., et Léon Foucault. Fol. p. 30. Paris, 1845–1846.

The text of the *Cours de Microscopie* of M. Donné was published in 1844, in Paris, but the Atlas before us has only just been completed. M. Donné has long been celebrated for his chemical and other investigations into the nature of certain of the animal secretions, and especially of the milk. His *Mémoire sur le Lait* was published many years ago, and has been exhausted—he informs us;—and it was in consequence of his having been invited to issue a new edition of it, that he determined to reproduce it in a separate work, and to associate with it his microscopic researches into the different fluids of the economy. Accordingly, the *Cours de Microscopie* contains the whole of his examinations of mucus, urine, sperm, milk, &c.

"These researches"—he observes—"extended and perfected as far as it was practicable for me since my first publications, united with the physiological considerations and practical applications that flow from them, form the principal portion of the lectures which I now reproduce." p. 9.

In his introduction to the "*Cours*," M. Donné announced, that an Atlas would be added to the work, and that it would present an innovation. "It will comprise," he remarked, "figures of two orders—the one will be executed according to the ideas I have formed of the intimate structure of the microscopic objects depicted: these systematic figures are intended to elucidate the descriptions in the text, and to complete them. Alongside these figures will be placed others representing accurately the objects independently of all interpretation. To attain this result I have been desirous not to trust either my own hand or that of a designer, always more or less influenced by the theoretical ideas of the author. Profiting by the marvellous invention of the daguerreotype, the objects will be reproduced with a rigorous fidelity unknown hitherto by means of photographic processes." And he subsequently added:—

"The first trials which I made to apply the daguerrean method to the reproduction of microscopic objects will be recollected. Four years ago I had the honour to present to the Académie des Sciences a daguerreotype microscope, by means of which I had obtained the images of several objects of natural history, and of certain tissues, such as the osseous and the dental. Since then, these trials have been resumed by a young *savant*, a distinguished *amateur* of photography. The results obtained by M. Léon Foucault with the daguerreotype microscope, not only on solid objects, but on the intimate particles of fluids,—such as the blood corpuscles of different classes of animals, the globules of milk, mucus and pus, zoospermes, &c., are truly most remarkable, and all give a special value to our Atlas. Our collection of designs is not yet complete, but what we already possess permits us to announce to micrographers results altogether worthy of their attention and interest."

The atlas before us is the one promised in the "*Cours*," and certainly the promises are well fulfilled. The representations of the fluids microscopically examined are beautiful, and their truthfulness cannot admit of question. Portions of the objects seen in the field of the microscope have not been selected; the *whole* field is given as it presents itself to the eye of the observer, and hence a much more correct idea is formed of the object—than if—as in the case of the blood corpuscles—detached portions were selected.

The plates are twenty in number, and afford varied and well executed representations of the blood corpuscles of man and certain animals; the circulation of the blood in the frog's tongue; mucous globules; epidermic cells; vibratory cells of the mucous membrane; pus globules; crystallization of healthy saliva; crystals of cholesterine; globules of yeast, and of fermenting diabetic urine; crystals of nitrate of urea; the crystallization resulting from the evaporation of the urine of a patient affected with typhoid fever; crystals of uric acid; divisions of the micrometer; pulverulent crystallization of urate of ammonia from the urine; minute crystals of uric acid proceeding from the decomposition of urate of ammonia by acetic acid; crystals of oxalate of lime from the urine, and of ammoniaco-magnesian phosphate; white filaments, such as are found in the first drops of healthy urine at each emission; blood corpuscles presenting the annular form which they affect when in contact with urine; zoospermes of man

and certain animals; crystallization of healthy urine evaporated on a plate of glass; ovulum of the rabbit in and out of the Graafian vesicle; ovula of the frog and salamander; globules of cow's milk; casein coagulated owing to the decomposition of milk and mixed with milk globules; globules of healthy human milk and of that of the ass and goat; the colostrum of the human female; milk of a woman delivered eight days, and not giving suck; muscæ volitantes; globules of potatoe starch; blood corpuscles of the salamander; and pollen grains of the flower of the mallow.

Great variety of illustration is presented; and both "Atlas" and "Cours" ought to be in the possession of every histologist and microscopist.

Address to the Graduates of Geneva Medical College, delivered January 26th, 1847. By CHARLES ALFRED LEE, A. M., M. D., Professor of General Pathology and Materia Medica in Geneva Medical College, etc. etc. Published by request of the Graduates.

This is an able address, and admirably suited to the occasion on which it was delivered. The valedictory address of a professor to his pupils, is almost necessarily monitory in its character. It is like the parting words of a parent to his son, pointing to his moral responsibilities and the great ethical rules by which he should be governed, and hence we rarely look for anything original, argumentative or ingenious; but it is something to express ordinary truths in language befitting the occasion, and calculated to win the attention, engage the affections, and persuade the judgment of the hearers. In these respects Dr. Lee has certainly been successful. We have room for only one or two extracts, which we select, not for any novelty in either the subjects or the sentiments, but for their importance and truthfulness.

"For some time after commencing your professional life, you will probably have some leisure time on your hands, which you can turn to profitable account by devoting it to study. Be not discouraged at the want of speedy success; your merits will eventually be known, and you will be rewarded accordingly. Justice will sooner or later be done you, and if you aim at eminence, and your efforts are well directed, you will attain it. Aim first at the establishment of character and reputation, with the full assurance that all desirable consequences will follow in their train.

Turn not aside into any of the devious, albeit fashionable, paths of quackery, so rife at the present day, by whatever specious name they may be known; sacrifice not your prospects and your good name by becoming the adherents of any partial and exclusive systems of medicine, for you may rest assured that they will all speedily disappear 'like the baseless fabric of a vision.' Belittle not your honorable title of PHYSICIAN by prefixing to it any distinctive or diminutive epithet, be it Thomsonian, Homœopathic, or Hydropathic; for why should you do this? Is not he who stands upon the broad platform of catholic medicine more likely to be better armed for attacking disease, than he who occupies some insignificant redoubt, or petty loop-hole. Is there any want of freedom of opinion in our profession? Is not every one at liberty to construct his own articles of faith, drawing from every system whatever portion of truth it may contain, and shape his practice accordingly? Medicine is not, as many seem to suppose, a system of rules and doctrines handed down from teacher to pupil, admitting no change, a set of formulæ which you are bound to sustain, and from which it were heresy to swerve; but it is a progressive and constantly improving science, and every true and sincere votary of it will employ *all* the remedies, means and resources within his reach, which accident or science has discovered, and observation and experiment verified. Away, then, with your partial systems which inevitably and professedly limit these means, and virtually nullify these resources. There is, indeed, Gentlemen, a sad relaxation of principle at the present day, even in some who are regarded as among the most distinguished members of the profession, as manifested by their patronage and recommendation of patented and secret remedies; a course of conduct which is obviously incompatible with every sentiment of moral duty, and every principle of sound medical ethics. To keep from the world any discovery calculated to benefit mankind, as connected with the preservation of human health, or its restoration when lost, is such a dereliction of duty, as to have met with the reprobation of the wise and good in every age of the world; and when this is done, as it generally is, for the sake of pecuniary emolument, the mind instinctively revolts at it, as an exhibition of selfishness and insensibility to human suffering disgraceful to our natures, and derogatory to the character of those who belong to a profession, whose foundation is philanthropy, and whose crowning glory is benevolence. Give not, then, the slightest encouragement to remedies of this description, or their inventors; frown indignantly upon all attempts to render our glorious art a mercenary trade; disgrace not your *Alma Mater* and your own reputation, by countenancing, in the slightest degree, any unworthy proceed-

ings of this kind, for by so doing you will justly forfeit all title to respect, and take rank with the Brandreths and Moffats of the day. The time is not distant when such a deep stain of disgrace must inevitably attach to patentees and proprietors of secret remedies in our profession, that neither the waters of Lethe will be able to obliterate, nor the exhibition of 'Letheon' to bury in oblivion.

Should any of you, then, hereafter discover a remedy calculatep to benefit the world, publish it upon the house-top, imitate the goodness of Providence, and make it free as the air we breathe; for the consciousness of having done a good deed for humanity, the gratitude of an intelligent community, and the praises of a liberal profession, shall prove a most satisfactory reward.

There is one duty which you owe to yourselves, to the sick who may be entrusted to your charge, and to society, by whose favour and confidence you are to be sustained, and this is—to shun the use of intoxicating drinks. I urge this upon you, Graduates of Geneva College, by every consideration of duty, of honour, of interest, and of philanthropy; I charge you, as you value reputation, usefulness, success, and an approving conscience, ever adhere to the strictest rules of temperance. You owe this to those who have sustained you thus far, and furnished you with the means of obtaining a medical education; you owe it to your teachers who have labored to instruct you in the various branches of your art, and who feel an anxious desire for your prosperity; you owe it to the beloved Alma Mater, who sends you forth with pride this day, to carry health and virtue and gladness to those who come within your influence; you owe it to the profession whose bright escutcheon must never be soiled by your example; you owe it to society in whose ranks you are now to be enrolled, we trust among its most valued and respected members; you owe it to your hopes of usefulness here, and of happiness hereafter; you owe it to a reformed and enlightened public opinion; and, lastly, you owe it to your God. As you go forth, then, upon the serious errand of your lives—an errand requiring the keen eye, the cool head, the steady hand, the sound judgment—take this, my solemn and affectionate warning, along with you; carry it into the social circle and the recesses of private life; take it into the hospitable mansions of the rich and the lowly dwellings of the poor; remember it in the hour of temptation and trial; heed it when the syren voice of pleasure beckons you along her flowery paths; so shall your lives flow equably along; your cup of happiness be filled; your days crowned with usefulness, and your names with honour."

THE MEDICAL EXAMINER.

PHILADELPHIA, APRIL, 1847.

APPLICATION OF REMEDIES TO THE INFLAMED SURFACE IN CHRONIC LARYNGITIS.

We observe in certain of the Medical journals somewhat intemperate discussions in regard to the first employment of topical remedies to the inflamed surface in chronic laryngitis; and great credit is given to Dr. Green of New York for having been an originator of the practice. Dr. Green's work has not been sent to us, and therefore we know nothing of the facts and arguments which he employs, but no reader of the productions of the day ought to be ignorant, that the works on the Practice of Medicine published in this country in 1842 contained details of the method advised by MM. Trousseau and Belloq, to whom the main credit is due for the introduction of topical agents into the larynx. The first edition of Dr. Dunglison's Practice of Medicine, published in 1842, and therefore written some time previously, refers to it, and so does Dr. Bell's edition of Stokes's Lectures, published in the same year. An injudicious exercise of friendship is often most detrimental to the cause which it is intended to support, and we think that Dr. Green has had ample cause to exclaim—"Save me from my friends!"

INSENSIBILITY DURING SURGICAL OPERATIONS.

In a former number, we mentioned that a patent had been taken out by two gentlemen in Boston, for the discovery of a mode of rendering patients insensible to the pain caused by severe surgical operations. It was then spoken of as a "*compound gas*," and since called "*letheon*." Misled at the time by the name given to the substance employed, we conjectured that it was an ethereal solution of some narcotic. It is now ascertained by numerous experiments, that sulphuric ether alone posseses the virtues claimed for the "letheon" or "compound gas," and hence much of the mystery with which the subject was sought to be enenveloped is dispelled, and as we believe it is generally conceded, both in this country and Europe, that the patent is invalid, the repugnance we felt towards any extended notice of the matter is removed, and we

shall from time to time notice the experiments and observations made in various parts of the world, confirmatory or otherwise of the good effects of this extraordinary agent. In our "Record" will be found an account of numerous experiments made with the ether in France, by some of the most distinguished surgeons, which may be regarded as an epitome of our present knowledge on the subject, so nearly does it accord with the recorded observations made in this country and in Great Britain. Notwithstanding the many favourable reports, we cannot divest ourselves of the belief that the employment of an agent which is capable of rendering a person unconscious of pain during the performance of a severe surgical operation, must, when carried to that extent, be fraught with danger—danger the more to be dreaded because it cannot be estimated, owing to variations in the dose, and the different susceptibilities of those to whom it is administered. Bad effects have indeed been repeatedly witnessed, and even death, in a few instances. The sagacious Velpeau, we perceive, looks upon it with great distrust.

JEFFERSON MEDICAL COLLEGE.

An account of the Commencement of this College, held on the 25th inst., will be found on another page, from which it will be seen that the Degree of Doctor of Medicine was conferred on one hundred and eighty-one gentlemen—the largest number ever graduated at any institution in the United States.

PENNSYLVANIA COLLEGE.

The class of this Institution during the last Session we understand numbered ninety-five; and the Graduates thirty-four, including two honorary Degrees.

FRANKLIN MEDICAL COLLEGE.

Five gentlemen were graduated at this new College at its recent Commencement. Of the number of the class we are not informed.

CITY OF NEW YORK MEDICAL SCHOOLS.

By the papers we are informed that the class at the University School during the last Session numbered four hundred and ten, and the number graduated was one hundred and twenty-three; and that at the College of Physicians and Surgeons fifty-one graduated.

ALBANY MEDICAL COLLEGE.

From a copy of the "Catalogue and Circular" of this Institution which we have received, we learn that the class of the last Session, (1846—7) numbered 100; and that of that number, 30 graduated at the conclusion of the term. The class of the previous Session numbered 115, and the Graduates 42.

TRANSYLVANIA UNIVERSITY.

We derive from the printed Catalogue of the Transylvania University, that the class in attendance on the lectures during the past winter numbered 182; and the graduating class 68, including 4 honorary degrees. The class of the preceding Session (1845—6) numbered 171, and the graduates 64; showing a small increase for the past Session.

RECORD OF MEDICAL SCIENCE.

Inhalation of Sulphuric Ether to prevent pain during Surgical operations.—The following is a digest of the discussions of the learned societies of Paris concerning the properties of this agent, and of hospital reports, contained in the *Gazette des Hôpitaux* for the last month:—

Académie de Medécine, Meeting, Jan. 12th, 1847.—M. Malgaigne announced that he had tried upon five patients the method proposed by the Americans, to render surgical operations painless. The first patient was a young man, aged eighteen, who was afflicted with an abscess at the lower part of the leg. He breathed the ether for two minutes, which sufficed to plunge him into a state of complete lethargy. The abscess was opened with a bistoury. In half a minute afterwards, the patient woke up, and affirmed that he had experienced no pain, and up to that time believed he had not undergone any operation, but wished it to be proceeded with.

The second, an Italian, a little older, who had a tumour in the neck, respired the ether for five minutes. By the time he had revived, the operation was finished. He said he felt that the tumour had been removed, but had not experienced any pain.

The third patient was a young woman, also having a tumour in the neck. She did not fall into a state of insensibility until she had inhaled the vapour for eighteen minutes. She did not feel the first

incision; but woke up immediately afterwards, and suffered during the rest of the operation as though she had not been submitted to its influence.

The fourth was a man who had had his leg broken by a rail-way truck, and underwent amputation at his own desire. He was submitted to the vapour of ether for seventeen minutes. On his coming-to, he said he had felt the operation, but had not suffered more pain than if he had lightly scratched his leg with the point of a knife.

The last, a young man, who was operated upon for strabismus, previously respired the ether for ten minutes without effect, and suffered during the operation as other patients would have done. In answer to a question from M. Nacquart, M. Malgaigne explained the process as used by the American surgeons, which he had adopted for the first patient; but for the others he had introduced into one of the nostrils, the other being closed, a tube leading from a vessel, the bottom of which was covered with ether—the patient inspiring by the nose, and expiring by the mouth.

M. Velpeau questioned whether ether was altogether innocuous to the system. He feared it might produce some injurious effect upon the patient, counterbalancing the advantage derived from the absence of pain. Besides, as the influence only lasted for a short time, its use in operations of a long duration was doubtful.

M. Guibourt had no fear of a bad result from the employment of ether, his only anxiety was as to the certainty of its operation, he himself having frequently and for a long time inhaled air strongly charged with ether, without experiencing any ill effect; and on this point he was supported by M. Chevallier.

M. Roux, of the Hôtel Dieu, detailed the particulars of a case of compound fracture of the leg in the *Gazette des Hôpitaux*, January 16th, 1847. The patient who was about forty-five years old, breathed by the mouth the vapour for twenty-minutes with great earnestness; in about ten minutes his eyes closed, but he still answered any questions put to him, and in ten minutes more the operation was finished; the pain thereof being evidently diminished, as the patient was not aware that the operation had been completed, until he was told such was the case.

Hôpital St. Louis.—A patient of M. Malgaigne—a man about thirty-five years old, of strong constitution, presented at the lower and internal part of the leg, about the level of the malleolus, a phlegmonous abscess—was submitted to the influence of the etherial vapour for two or three minutes, which short space of time sufficed to put him into the state necessary for the commencement of the operation, which can only be compared to drunkenness. M. Malgaigne addressed the patient, asking him whether he felt any particular sensation, or found his sight confused. The man having answered that his vision was imperfect, M. Malgaigne immediately used the bistoury, making an incision in the abscess and in a portion of the skin much supplied with nerve and considerably inflamed. He then pressed the pus from the abscess. On the termination of the operation the

patient appeared agitated—his face was red, his features contracted, his eyelids closed, and, in short, his whole muscles, particularly those of the face and superior-extremities, exhibited symptoms of abnormal contraction. He seemed to be under the weight of painful feelings which he wished to shake off. He had undoubtedly lost his reasoning power, for his conduct was outrageous—he closed his eyes, and foamed from the mouth. This state lasted but two or three minutes. He was aroused by the voice of M. Malgaigne, and on recovering his consciousness he declared the pain was slight, not more than a prick, but he directly afterwards complained of the smarting which resulted from the wound.

A second patient, a man aged forty-five, had necrosis of the bones of the finger, resulting from a whitlow. M. Malgaigne determined to remove the finger, at the articulation, and caused the patient to inhale the ether for about four minutes. The patient declared he was drunk and unable to see. The operation was performed in the usual manner. This patient also compared the pain he felt to a prick, afterwards experiencing the sensation of smarting over the surface of the wound. The pulse was carefully observed during the operation, and found to be eighty-eight during the inhalation of the ether, and ninety-two after the operation.

A young girl of eighteen, with an affection of the hand, requiring incisions, was submitted to the action of the vapour, and in four minutes she declared her sight to be confused. She compared the operation to a prick. It is remarkable that in this case there was a considerable want of sensibility in the wound for some time after the operation.

M. Malgaigne administered wine in each of the last cases, to effect a more speedy recovery from the stupor; and it may be worthy of notice that the air exhaled was impregnated strongly with ether, so that it was impossible to mistake the agent that had been employed.

At the meeting of the *Académie de Medécine*, on Jan. 19th, a letter was read from M. Menière, respecting the successful employment of vapour of ether in cases of nervous deafness, hemicrania, paralysis of the facial nerve, complaints of the cavity of the cranium, &c.

M. Honoré mentioned a case of intense neuralgia, which was alleviated by the breathing of the vapour of ether, placed in a vessel with a large mouth, held close under the mouth.

M. Malgaigne made the following important observations as to the consequence of the use of ether:—In the case of amputation of the leg, he believed that there was less reaction than in ordinary cases; and another point, which he recommended to the attention of psychologists, was, that in most cases it appeared that the seat of sensation for pain was different from the seat of ordinary sensibility. Many patients retained perfect consciousness, understanding what was said to them, answering correctly, but feeling no pain; it really appeared to him that there were two centres of sensation.

A discussion also took place at the meeting of the *Academy of Sciences*, on January 18th, when M. Velpeau stated that he had failed

in obtaining a complete and satisfactory result from the use of the vapour of ether. One patient had proved unmanageable. In another, the sensorial functions were evidently disturbed; but he had suffered pain while being operated on. A third had suffered in a like manner; but declared that he was plunged into such a state of ecstasy, that he was unable to complain. In short, it appeared that it succeeded with certain persons, and failed with others; and that it was not proved to be altogether without danger.

M. Dunos said that he had been led, from some experiments, to believe that the ether possessed a cataleptic power.

On the 22d of January, M. Velpeau, at the *Hôpital du Charité*, having used an apparatus constructed by M. Charrière, succeeded perfectly in removing a tumour without pain. The etherial vapour was inhaled by the patient about four minutes, after which time complete insensibility and relaxation of the muscles were manifested.

M. H. Larrey, who assisted at the operation, suggested the valuable assistance that the agent would render in the reducing of difficult luxations.

At the *Hôpital du Midi*, a case occurred in which the sensibility seemed to have been exalted by the inhalation.

The influence of the vapour has also been tested by M. Guersant, at the *Hôpital des Enfants*, on two children. One child, whose finger was amputated, declared that she felt pain, but was totally unable to cry out. The other, on recovering from the state of insensibility into which she had been thrown, declared that she had no recollection whatever of the operation.

At the *Hôpital du Midi*, M. Ricord, in injecting in a double hydrocele, employed the inhalation with success, though he was obliged to renew its influence twice during the operation. A second patient, afflicted with single hydrocele, after respiring vapour for thirteen minutes, fell into a complete state of insensibility; the limbs were relaxed; the pupils contracted; the conjunctiva was injected; and the pulse not affected. A third patient, who was apparently perfectly under the influence of the ether, suffered the usual amount of pain during an operation for removing a tumour from the rectum.

In the first two cases, a state of intense exhilaration preceded that of insensibility. In the last, the use of the ether was followed by sickness and fainting.

At the meeting of the *Societé de Chirurgie de Paris*, Jan. 13, 1847, M. Malgaigne mentioned a case in which the inhalation having been continued for too long a time, caused sinking of the pulse and coldness of the extremities to such an extent, that fears were entertained for the life of the patient.

At the meeting of the *Académie de Medécine*, Jan. 26, 1847, M. Landouzy called attention to a case, where hæmorrhage, after removal of a small tumour from the mastoid process, did not come on till half an hour after the performance of the operation; and suggested that surgeons should be on their guard lest accidents might happen from the arteries not being secured.

M. Honoré stated, that he had succeeded in relieving a patient

afflicted with most obstinate neuralgia of the face, by the inhalation of ether vapour for about two minutes.

Académie des Sciences, Meeting, Jan. 25.—M. Gerdy related several experiments with the vapour of ether, the results of which had been satisfactory in the highest degree.

From the above it will be seen, that the success which our neighbours have met with has been varied; but we think that in most of the cases in which the ether failed to produce its stupifying effect, that fault was clearly in the instrument used for its administration. At first they attempted to use this agent by causing the patient to inspire by the nostrils, and respire by the mouth, and *vice versâ*; but afterwards they found it requisite to close the nostrils while respiration was carried on by the mouth alone.

The fact announced by M. Malgaigne, that some of the patients retained their consciousness, but felt no pain while being operated on, is most interesting, and we leave it to be commented on by physiologists; but the statement requires confirmation by other observers.

The influence, also, over the power of *expression* of pain, is also very curious, but seemed to be quite an uncommon result; for we only find that this was the case in two out of the numerous cases quoted.

The continued lethargy, with failing of the pulse, and coldness of the extremities, is certainly a most awkward complication to deal with in treating the shock of an operation, and one which should make us cautious in the employment of the vapour of ether. In this country, in more cases than one, this unpleasant effect followed its use.

If the vapour of ether prove an efficient therapeutic agent in the treament of neuralgic affections, then, indeed, will its introduction prove a boon to society. And we much regret that M. Honoré did not give a more detailed account of those cases in which he employed this remedy.—*London Lancet.*

Observations on two Forms of Dysmenorrhœa. By Henry Oldham, Physician-Accoucheur and Lecturer on Midwifery at Guy's Hospital.

Case.—*Painful but copious menstruation—dysmenorrhœal membrane—large and retroverted womb—bleeding—mercury—cure.*—Mrs. G., æt. 31, living at Bow, was pregnant soon after marriage, and bore a living child, which is now nine years old. Since this time she has had several early abortions at the fifth or sixth week: and a year ago, when pregnant, she was much frightened at an accident to her husband, and again miscarried. Both before and since this time she has suffered a great deal from pains in the back and hips, for which she has been under medical treatment.

She first consulted me on Nov. 20th, 1844, when she was evidently suffering severely. Her countenance was distressed; she walked with pain, and appeared to be much out of health. Her

symptoms were referred almost entirely to the uterus. She complained of habitual pain, which she called painful pressure, at the sacrum, running down to the anus; constant pain in the right inguinal canal; occasional dysuria, which, with the other pelvic symptoms, was much increased by walking or exertion of any kind. When she sat down their was pain produced within the pelvis. The bowels were relieved without pain. A copious thick discharge, sometimes white and at others yellowish, had troubled her for years. Sexual coitus had caused much suffering, and, in fact, had been abandoned. She menstruates regularly, but with severe pain; sometimes copiously, so that several clots escape, and sometimes shreds of membrane have been noticed: she feels better and lighter after the periods.

On examination, the vagina was found loose and hotter than usual, and freely bathed with discharge. The posterior wall bulged a little beyond the ostium vaginæ. The uterus was found within two inches of the orifice of the vagina: the vaginal portion was tumid, soft, slightly painful to the touch; and the os, which was patent and uneven, gave that feeling of raised soft granulations which characterizes the most common form of ulceration of this part. This portion of the womb was directed towards the under surface of the urethra. The body of the womb was readily felt backwards towards the hollow of the sacrum. It was much swollen, very tender when touched, and was evidently retroverted. On directing the finger to the front part of the cervix, and pressing the part downwards and backwards, the body of the womb was readily redressed, and she felt at once a relief from the painful sense of pressure in the sacrum and hips. When the finger was removed the womb fell heavily back again towards the sacrum. By speculum the cervix showed a surface of vividly injected granulations, and a large plug of mucus was pressed out from its cavity.

The treatment in this case consisted in scarifying the cervix, and thus bleeding the womb; taking from one to two ounces of blood at a time, which was repeated on several occasions. She was kept at rest; the bowels were relieved by saline aperients, and she used the following injection:—Dec. Papav. vj.; Ext. Conii. ℥j.; Liq. Plumb. diac. ʒij. Speedy relief followed the use of these means, and I did not see her for some time.

In July, 1845, she brought me a portion of membrane, which had been passed at the last period, after severe pains like labour pains; and on examining it I found it was a good specimen of dysmenorrhœal membrane. She told me at the same time that she was convinced that in several of her supposed early abortions she had passed the same product. On two or three occasions after this, she brought me portions of membrane which were cast off after severe suffering at the menstrual time, which were now often deferred for a few days or a week beyond their proper period. On the 10th of February, 1846, after a period of intense pain, she again passed some detached portions of membrane. She had had difficulty in emptying

the bladder, which was relieved by her passing water in the upright position. The uterus was found retroverted, and the body was swollen into a large globular hardened mass, painful to the touch. Any exertion produced great pain in the sacrum and hips, which was again at once relieved by redressing the womb during a vaginal examination.

I now determined to leech the uterus once a week, to keep her strictly at rest, and to put her under a course of mercury. The effect of this was to reduce the womb, and to give her great relief. She passed through the two following periods without much suffering, and no membrane was cast off. On the 30th of May she brought me two small portions of membrane, which had caused her some severe pain when passed. The seat of pain was in or about the right inguinal canal, and she said that she could touch the spot from whence she fancied the membrane was torn away. The remainder of the period was passed without pain. The uterus was now very much reduced in size, and although more vertical than it should be, it was not inclined backwards. She is able to walk and follow her usual pursuits without pain. A blister was applied to the sacrum, and a little mercurial ointment was rubbed at night over the painful part. Since this period she has menstruated with comparative comfort, and the womb, although perhaps rather large, may be said to be fairly healthy and well placed.

This is a case which in its general features is frequently met with in practice, and it may be very well taken to illustrate the pathology, symptoms, and treatment, of the membraneous form of dysmenorrhœa. It will be seen that painful menstrual periods, with a copious rather than a scanty flow, the unfolding and casting off of portions of membrane, then a large heavy indurated womb, the weight of which destroys its balance and displaces it backwards, are the principal signs to be noticed. Partial prolapse too, congestion and ulceration of the cervix, with sterility, may also be remarked. It is not my design in this communication to treat at full length the subject of membraneous dysmenorrhœa, but a few remarks on the sequence of morbid actions in this class of cases, with the treatment which is indicated, will, I hope, be thought useful.

The membrane which is thrown off from the womb in this disease varies in its appearance; sometimes a clear tubular cast of the uterine cast is expelled, although this, I believe, is comparatively rare. More frequently, small portions the size of the nail, or larger pieces of an irregular shape, are detached, and cause severe suffering in their expulsion. Sometimes the menstrual blood coagulates around a portion of membrane, and comes away as a hard compact clot. Very often the discharge consists of thin thread-like portions, and sometimes half a cupful or more of thick branching tufts, very much like the chorion villi filled with blood, will be thrown out from the womb. This latter variety of discharge has, I believe, been mistaken for the so-called hydatid degeneration of the placenta, which I feel persuaded never takes place unless impregnation has preceded it, and

a true chorion formed. How is this membrane produced? It is generally thought to be lymph, but if some good specimens are carefully examined, they will be found to possess the same structural elements as the uterine decidua. Not only do they resemble the decidua in having an attached rough surface and a smooth free one, but what is far more significant of their identity is, that they are full of little holes with epithelial scales, which I cannot doubt are the openings and epithelium of the follicles of the uterine glands. It is very true, as Dr. Montgomery has noticed, that the small cotyledonous sacs are wanting. But this is often the case in the flaps of uterine decidua which are thrown off in abortions, although here and there very perfectly formed specimens of them are to be found. I doubt whether the swollen uterine glands bulge out into sacs until the ovum gets fixed by its exochorion within them, as, in two specimens of extra-uterine fœtation which I have examined, the very exuberant decidua, with its characteristic apertures and epithelium, still remains tubular without expanding into cells. I have for some time entertained the conviction that the membrane cast off in dysmenorrhœa is formed from the enlarged uterine follicles, just in the same way as is the uterine decidua, and that, like it, it is detached from the cavity of the womb. The shred-like masses are caused by a very recent and imperfectly formed membrane, which breaks up and becomes mixed with and stained by the menstrual blood.

The practical bearing of these remarks is, that as the uterine decidua is formed under the influence of an action going on in the ovary, so the membranous dysmenorrhœa is not primarily an affection of the womb, but of the ovary. In healthy menstruation the congestion of the ovary, the engorgement of the womb, the opening of the veins on the surface of the cavity of the womb, and the flux of blood, are all in harmony, the latter being, so to speak, the resolution of the former. But when the ovaries are unduly excited, as, for instance, from the prevalence of one or more of the numerous ways in which sexual feelings may influence them, then the uterine glands sympathetically enlarge, the lining membrane of the womb becomes raised, and the body of the womb swells out. This change in the mucous membrane goes on during the interval between the monthly periods, and when the flow begins the new formation is cast off, and the uterus in the act of detaching and expelling it becomes the seat of very painful contractions. Gendrin, Jörg, and others, have enumerated amongst the changes which are observed in the internal sexual organs during menstruation, that the lining membrane of the womb is covered with fungiform villi which are probably vascular. And this observation would seem to be related to Müller's idea, "that menstruation is the result of a periodical regeneration, a kind of moulting of the female generative organs, attended perhaps with the formation of a new epithelium." I lately examined the uterus of a young female who died menstruating, but the mucous membrane was still clear and smooth. Blood exuded freely when the substance of the womb was pressed, but there was no appearance of that raising

of the lining of the membrane of the womb which is erroneously described as from fungiform villi. I very much doubt whether this change, and the consequent periodical moulting of the mucous membrane of the uterus, occurs uniformly during menstruation. It is speedily produced, however, under any morbid excitement of the ovaries, and is then cleared off either in threads, or thin flimsy portions, or in larger and denser patches, according to the degree of developement at which it has arrived.

But there is a sequel of the membraneous form of dysmenorrhœa which merits more attention, namely, the tendency of the womb to become permanently bulky and hard, and as the result of this to become retroverted. I can bear testimony to the truth of an observation of Dr. Rigby, that retroversion is one of the most common affections of the unimpregnated womb, and I would add, that one amongst several causes which produces it is the continuance of this membranous dysmenorrhœa. It will be noticed in the case I have related, and it is a mark of distinction between this and obstructed dysmenorrhœa, that at first a copious menstrual flow took place—menorrhagia, in short. This symptom, while it shows the way in which two different functional disorders of the womb are associated together or run into one another, is, I believe, a salutary effort to relieve the morbid congestion of the uterus. Like hæmorrhage from other organs when diseased, it is really conservative, a useful topical bleeding. But after a time the uterus does not recover itself, it becomes heavier and larger, and it appears that the posterior wall swells out more than the front wall, and then the womb loses its natural inclination forward; it first becomes vertical, then inclined backward, and at last retroverted. This change occurs slowly, sometimes taking many months to accomplish. The texture of the womb becomes altered. In a recent congestion the posterior wall is felt soft, compressible, and painful to the touch, but after repeated engorgements the tissue becomes harder, more solid, very much like a fibrous growth. A further change too I have noticed, which is, that occasionally when the womb is thus displaced, it excites inflammation in the neighboring peritoneum, false membranes are formed which fix the womb, and an irreducible retroversion is the result.

I have laid some stress on the swelling of the posterior wall, because it appears to me to be more sensibly affected by congestion than the anterior wall. The natural convexity of this part becomes still more prominent, and, when examined by the finger, it often feels so round and solid, and swells out so abruptly from the cervix, that I am quite sure that it is often mistaken for a fibrous tumour. This swelling of the posterior wall forms a good practical distinction between a womb enlarged by congestion and a womb distended by an early pregnancy. I have been in the habit of depending very much on the even enlargement of the anterior wall of the womb, which is quite appreciable to the finger, as a good diagnostic mark of an early pregnancy. The natural flatness of the anterior wall is quickly ef-

faced by pregnancy; so that, so early as a month or five weeks, this physical change may be detected.

The symptoms which attend this form of retroversion are not, generally speaking, so severe or so well marked as might be expected, or, indeed, as they are described. It is rare for the displaced womb mechanically to interfere with the bladder or the rectum, and as rare for it to press upon and obstruct the veins. Sometimes, however, if a person has been standing for any length of time, especially during menstruation, dysuria ensues, which is relieved by lying down for some hours. The rectum, too, in these cases, generally escapes pressure; and it is surprising, even when the womb is very solid and bulky, appearing to the finger to fill the cavity of the sacrum, how rarely mechanical constipation ensues. In these cases, as in pregnancy, there seems to be some mechanism, which, I think, notwithstanding what has been said about it, is yet unexplained, by which the uterus is directed towards the right side of the pelvis, removing it from the rectum. There are, however, a class of cases where engorgement of the womb is associated with hæmorrhoids and bleeding from the rectum, which ought not to be confounded with the present cases; they occur in women whose digestive organs have been long disordered,—who indulge freely in eating and drinking, and take but little exercise,—whose bowels are habitually constipated, and the colon loaded. The urine in these cases is often charged with lithic acid, and, as a consequence of the portal congestion, the hæmorrhoidæl veins swell, and eventually the uterus becomes engorged. Painful and oftentimes copious menstruation occurs in this form of complaint, as Dr. Rigby has so well shown; but the pathology of the two classes of cases is essentially different. In the one, the depraved state of the digestive organs induces engorgement of the womb; in the other, the affection is at first confined to the internal sexual organs, and any disorder of the general health is slowly induced.

The principal symptoms which I have noticed as the result of the large and retroverted womb have been, an habitual weight in the lower part of the abdomen, and a painful sense of pressure about the sacrum; pain of a dragging kind referred very distinctly to the inguinal canals, but very often only to one of them, with pain in the corresponding hip. There is pain, too, in sitting down, and a feeling as though some body were pressed upwards. If the cervix gets bulky and full, a thick mucous discharge comes on, which frequently is discharged in lumps.

It has been advised in these cases to redress the womb by means of the uterine sound; but I think this expedient is very rarely required. If the forefinger is placed against the anterior part of the cervix, and this part pressed backward, the womb, although large and heavy, may readily be raised and directed forward, and, in the act of reducing it, a sense of its weight and the extent of its displacement is conveyed to the finger. No permanent good, however, is obtained by the operation, as the womb quickly falls back again, and the same symptoms of pressure, which for the moment were relieved,

again come on. I have known a great deal of pain caused by using the sound in the way described; and, if the womb is held by false membranes, to attempt to overcome the resistance by the sound would be not only painful but dangerous.

In the treatment of membranous dysmenorrhœa, with a large, hard, retroverted womb, I have found the plan which was adopted in the case described the most effective. It consists in keeping the patient as much at rest as possible, in regulating the diet so as generally to avoid stimulants, but not to lower the strength, and to give small doses of mercury, so as slightly to affect the gums: two grains of blue-pill, with three of Ext. Conii, night and morning, or five-grain doses of Plummer's pill night and morning, answer the purpose required. On the first appearance of the gums or palate being tender, I generally give the Liq. Hydrarg. Bichlorid. ʒj. in sarsaparilla or bark, which, while it keeps up the action of the mercury, is really a tonic, and improves the general health. If the patient does not bear mercury well, it is well to commence and continue with this last preparation, and a small quantity of blue ointment, with Ext. of Belladonna, may be rubbed at night over the inguinal region. Leeches should be applied to the upper and back part of the vagina once a week. Three or four will in general be sufficient, and I can safely say that they are easily applied, and offer the most effective means that I know of for reducing the womb. Cupping on the loins, or leeching the inguinal regions, are, in my experience, far less useful for the purpose. In the case which I have related the cervix was scarified several times because of the vascular granulations which covered it; but unless a surface of this kind is present, which bleeds freely on being lightly cut, I do not think it a good plan of local depletion. When the size of the womb is reduced by these means, an occasional blister on the sacrum will be found very useful. I have generally found patients obtain great relief by their application. The reduction of the womb may be assisted by warm hip-baths, or the injection of warm poppy-water into the vagina. By following out this plan of treatment, and attending to the general health, I have often succeeded in reducing these large, solid, hypertrophied wombs, with the dysmenorrhœa which accompanied them, and the conviction has forced itself upon me, that the cases of fibrous tumour which have been supposed to be cured have really been cases of this kind. When the influence of mercury is obtained, small doses of Iodide of Potassium, or, what I have found more useful, small doses of the Liq. Potass. Arsen., may be given with advantage. The latter medicine should be administered in the way recommended by Mr. Hunt—on a full stomach, and in decreasing doses.

Sometimes the womb has so long been displaced, and is so very hard, that it seems to resist any attempts at cure. I have now a case of this kind under care in a woman æt. 48, who has ceased to menstruate for a year and a half. In this, as in similar cases, the metallic stem support described by Dr. Simpson effectually retains the womb *in situ*, but I have not found this instrument desirable in other cases.

The object generally is not to support a large womb, but to lessen its size, to stop the ovarian excitement which is causing it, and to secure its spontaneous reduction. In these cases much comfort is obtained by an elastic abdominal belt, with a perinæal support.

The views which have been propounded on this subject may be expressed in the following conclusions:—

1. There is one form of menstruation rendered extremely painful from the production and casting off of a membrane from the cavity of the womb.

2. That this membrane is not a product of inflammation, or a thick mass of epithelium, but it is formed from the uterine glands just as the decidua is, and is detached and expelled in the same way.

3. That the morbid action does not begin at the uterus, but in the ovary; and the sequence of effects is first ovarian congestion, calling forth a sympathetic growth of the uterine glands, forming a false decidua and uterine engorgement.

4. That this uterine engorgement is oftentimes relieved by a profuse menstrual flux; but if not, the posterior wall of the womb gradually increases in bulk and becomes hard, the balance of the womb is spoiled, and the body falls back, retroverting the womb.

5. That the swelling of the posterior wall, and the falling back of the womb, forms a differential diagnosis between congestion and early pregnancy, the anterior wall enlarging in the latter, and the body of the womb directed forward.

6. That the symptoms of retroverted womb from this cause are not often those of mechanical obstruction to the other pelvic viscera, and they are for the moment relieved by redressing the womb, which may almost always be effected by the finger without the aid of the sound.

7. That the treatment consists in strict attention to the general health, but that the most effectual way of removing the disease with the enlarged womb is by leeching the uterus, and the use of mercury.—*London Med. Gaz.*

Tuberculous Abscess in the Pancreas.—The rare occurrence of disease of the pancreas renders the following case interesting. The subject of the case was a young female, aged 25, who had for a considerable time been out of health. Four years ago she had suffered for about two months from severe pain at the lower part of the chest, extending through to the back, which prevented her from lying on her right side or on her back. After the subsidence of this attack she seems to have continued in tolerable health for nearly three years, at the end of which time she became affected with lassitude and debility, uneasiness in the chest and bilious vomiting. The vomiting would sometimes last four or six hours. From this time her skin slowly and gradually became jaundiced, and continued so to the date at which she came under M. Cruveilhier's care, who has recorded the case. She complained at this time chiefly of loss of appetite, and inability to lie on her back in bed unless propped up. Her tongue was moist, and digestion good; but her bowels were obstinately con-

fined, so that she did not require to go to the closet oftener than once in four or five days. The evacuations possessed their natural colour. She had some uneasiness on pressure over the epigastrium. The margin of the liver could be felt below the cartilages of the ribs, and appeared slightly enlarged: some pain was caused by pressure over this organ. The urine was not high coloured, and formed no precipitate on the addition of nitric acid. She had now very little uneasiness in the chest; no cough, palpitation, or headache. Neither by auscultation nor by percussion could any thing abnormal be detected in the lungs or heart. Some slight remedies were made use of. In about a week she became feverish and generally ill, without any known cause: in the evening of the same day she vomited some bile. The vomiting continued next day, and was accompanied by loss of appetite, and severe pain at the pit of the stomach. The pulse was 100, small and feeble. The vomiting was almost incessant for the two following days, when she became extremely exhausted: the pain in the epigastrium was most severe. No evacuation from the bowels had taken place since the commencement of the attack. Tongue dry, furred, white on the dorsum, red at the tip. Pulse 90, small. She died exhausted the same evening.

The liver was found rather larger than natural; its right lobe firm in texture, and of a peculiar greyish green colour throughout. About two ounces of dark green bile were contained in the gall-bladder. The glands in the neighbourhood of the stomach were enlarged, softened, and infiltrated with a blackish matter. Those near the pancreas were also enlarged, and filled with tuberculous matter. The pancreas was about natural in size. Within its last half, or tail, was found an abscess, capable of holding a small hen's egg. It was filled with thick purulent matter, and its cavity was lined by a thick and tough, greyish, organised membrane, within and around which were numerous softened tubercles. External to the abscess the tissue of the pancreas was spread out, and appeared atrophied. The right half of the pancreas was dark coloured, but healthy in structure. The pancreatic duct was entire. Two small cretaceous masses of tubercles were found in the spleen, and two similar ones in the apex of the left lung. Traces of recent violent inflammation were found in the stomach, the duodenum, and for a short way down the jejunum.—*Ibid. from Gaz. des Hôpitaux.*

MANCHESTER PATHOLOGICAL SOCIETY.

Detection of Sugar in the Expectoration of Patients affected with Diabetes.—Dr. Francis presented to the Society a specimen of sugar which he had obtained, a few days previously, from the expectoration of a man the subject of diabetes mellitus.

The patient, aged 25, for upwards of a year suffering the ordinary symptoms of this disease, and at present much wasted in flesh, had, during the last six months, shown signs of advancing pulmonary phthisis. The expectoration latterly had amounted to little less than

24 ounces daily, and, on the day which furnished the specimen submitted to examination, had even exceeded that quantity. It was composed of an abundant white, frothy, tenacious mucus, holding in suspension little rounded masses of opaque yellow material.

In order to the detection of sugar, the expectoration was, first of all, treated freely with strong alcohol, which coagulated much of the albuminous matters. Distilled water was then added, and, after agitation and digestion for a short time, the whole was thrown upon a filter, and a clear watery fluid readily passed through.

A small portion of this fluid reduced the protoxide of copper when tested after the manner recommended by Trommer, and another portion underwent fermentation over mercury.

The remainder was evaporated in a water-bath to dryness, the residue broken up into fragments, and digested for several hours in alcohol, which was then filtered. The alcoholic solution thus obtained was of a yellowish tint, clear, and decidedly sweet to the taste. On evaporation, it left the considerable quantity of sugar now produced to the Society, and which will be found partly crystalline, of a rich sienna brown colour, strong honey-like odour, and intensely sweet taste.

A fluid ounce of the expectoration, after dilution with water, yielded by fermentation a trifle more than 2¼ cubic inches of carbonic acid, which would be equivalent to 2¼ grains of sugar, or 50 grains to the imperial pint.

The urine passed at the time of the examination contained sugar; its specific gravity was 1032, and its average standard for some days has been about 1035. The quantity passed was much less than formerly.

Dr. Francis had detailed at length the account of the process he had used, because, so far as he knew, the presence of sugar in the expectoration of diabetes had not previously been sought; at any rate, he could find no allusion to the subject in the Sydenham Society's edition of Simon's Animal Chemistry, which, with the notes of its accomplished editor, may be assumed to have brought our knowledge in such matters up to the present time.

In addition to the above case, he had, within the last two days, had the opportunity of examining the expectoration of another man who was under treatment two years ago with diabetes, and who, in addition to this, is now far advanced in phthisis. Here the expectoration was more scanty, and consisted of purulent matter, rendered tenacious by an admixture of rust-coloured secretion from a little local pneumonia. In this case an ounce of sputa contained so much as about seven grains of sugar.

It might be found, he thought, when closer attention came to be given to the subject, that there were other organs than the kidneys habitually playing an active part in the removal of the sugar which was accumulating in the blood during the progress of diabetes. There were, at least, some grounds for believing such might be the case from the results just detailed, and, if so, the quantity of sugar

escaping in the urine could not be viewed as an absolutely safe index to the quantity formed in the system, unless taken in conjunction with other means of its elimination.

The cases might further be looked upon as furnishing an argument, if further evidence upon the subject were necessary, that the kidneys play no part in the formation, but merely in the separation from the blood, of the sugar.

Raspberry-like Nævus.—Mr. Thompson, of Stalybridge, presented four nævi, removed by ligature, which were interesting by reason of the proof they afforded of their hereditary character. One was larger than a walnut, and three equalled raspberries in form and size. In colour they were bright blood red, and their surfaces resembled exactly the raspberry in appearance.

They were removed from the right shoulder of a very healthy woman, aged 44 years, who had borne eight children. She first noticed the large nævus in her eighteenth year. It was then like an ordinary brown mole, possessing very little sensibility. After a time it increased in size, and at length became very sensitive and painful, and acquired the appearance described. It was attached to the skin by a peduncle about a quarter of an inch in diameter, which was occasionally excoriated, and discharged a very offensive fluid.

This woman's daughter, maternal grandmother, and great grandfather, have all had similar nævi.—*Ibid.*

Considerations on the Treatment of Typhoid Fever. By M. Gendrin.—Typhoid Fever,—the dothinenteritis of Bretonneau, and typhus abdominalis of the Germans, has lately become unusually common in Edinburg. It may be said to be the prevailing form fever of both in that city and in Glasgow, a circumstance sufficiently curious, when it is remembered that, for several years past, no intestinal lesion has accompanied the disease. It was first remarked by Prof. John Reid, when pathologist to the Edinburgh infirmary, that the few cases which appeared there, always came from the country, more especially from Linlithgow, or Fife, and never originated in the city. Dr. Hughes Bennett, the present pathologist, has, for more than three years, had occasion to confirm the truth of this observation, and lately stated (see report of Ed. Medico-Chir. Society, Month. Journ., June, 1846), that during that time, only two cases had occurred in the infirmary. During the present winter, the disease has been very common, and he has examined upwards of twenty cases, in which the follicular lesion of the intestines has been more or less well marked. Under these circumstances, observations on the treatment of this affection, by so experienced a physician as M. Gendrin, condensed from a lecture he lately delivered, may be considered as particularly well timed.

According to M. Gendrin, typhoid fever must inevitably pass through its three stages of increase, intensity and decline. He insists on this, because the practical rules which result from it, are, that the

disease cannot be cut short, that the expectant system is the basis of our treatment, and that the active interference of art ought to be limited to accelerating the evolution of the disease, and to moderating the accidents which arise during its course.

Thus, in a slight case of typhoid fever, M. Gendrin only follows the expectant system of medicine. He causes it to consist in surrounding the patients with all the hygienic precautions compatible with their social position: submitting them to a dietetic regimen, having relation to the state of their digestive organs, and removing all those moral influences which may act injuriously upon their minds or bodies. In this manner a cure is effected in a considerable number of cases.

When the disease is severe, a more active treatment is necessary, consisting of blood-letting, evacuants, baths, epispastics, alteratives, &c.

M. Gendrin believes it useful to practise one or two bleedings from the arm in the first stage; but when this has passed, when the petechial eruption is developed, he considers no benefit is to be thus obtained. Local blood-letting, according to him, causes more injury than benefit, for leeches or cupping applied to the abdomen, act at too great a distance from the inflamed intestine, to render them efficacious: and, on the other hand, a quantity of arterial blood is removed, which enfeebles the patient without doing any good.

In many cases, dyspeptic symptoms may be observed at the commencement, or during the progress of the first stage. All the individuals who enter his wards with stomach symptoms take an emetic with the best results. Typhoid fevers, accompanied at their commencement with symptoms of prostration, are transformed into a benign fever, under the influence of a vomit. Such was the treatment the French found to succeed completely at Vienna in 1809. It is only necessary that the emetic should be administered at an early period, for when the petechial eruption has occurred, and ulcerations have taken place in the small intestines, or an erythematous state in the stomach, the remedy is more hurtful than beneficial.

M. Gendrin strongly condemns the indiscriminate use of purgatives, more especially drastic ones, which he rejects altogether. The only agents of this class he employs are gentle aperients, emeto-cathartics, which, in addition to a local, conjoin a general action. He prescribes these remedies at the commencement, and sometimes during the decline of the disease, when there remains some flatulence, and liquid matters remain in the intestines, as is announced by gurgling. A saline purgative will then excite the action of the intestines, and decide the convalescence.

M. Gendrin has employed cold affusion in typhoid fever for fifteen years, causing water to trickle over the surface, or to be applied with a sponge. He considers it most efficacious in moderating the symptoms of the first stage, and it is very grateful to the patient. The subtraction of caloric in this way causes the pulse to fall from 120 to 80 and even to 60 beats in the minute. It sometimes happens that the

pulse very slowly rises again, and therefore it is necessary to proportion the subtraction of caloric to the reactive powers of the individual. It should only be applied in the first stage, for after the eruption, reaction is not possible.

Tepid baths, on the other hand, are applicable exclusively to the adynamic period. They then serve to re-establish the action of the skin. It is necessary to prevent their too prolonged use, and too high temperature, otherwise they become debilitating.

Epispastics, more especially blisters, are at present very little employed.

In the last stage tonics are often necessary, especially combined with nutritive substances. M. Gendrin gives, with beef tea (bouillon), the wine of quinine; which has the advantage of uniting a fixed tonic with a diffusible stimulus. Wine, associated with bitter and aromatic substances, he prefers to camphor, which is only useful when there are ataxic symptoms.

Lastly, M. Gendrin speaks of the medicines which act chemically. They are, Seltzer water, chloride of sodium, alkalies, and chlorine, administered internally. All these preparations, according to the Professor of la Pitié, have no great advantages to recommend them. The effervescing lemonade only constitutes an agreeable drink, the action of which, slightly stimulating, may be rendered serviceable. With regard to the chlorates and chlorurets, they have such an insupportable odour, as to be rejected for this cause alone, even were their therapeutic inutility not proved by experience.—*Monthly Journal of Medical Science, from Journal de Medicine et de Chirurgie Pratiques.*

Case of Pulsating Veins. By Sir H. Marsh, Bart.—Catherine Duffy, aged 28, was admitted into Steevens' Hospital under Sir Henry Marsh, 13th May, 1846, presenting the following appearance:

All the superficial veins of the right arm and hand are greatly dilated; those on the back of the fore-arm, above its middle, being much convoluted as well as swollen. The veins on the back of the hand are much contorted, and in various places varicose. On the little and ring fingers the veins present, in a well-marked manner, the appearance of aneurism by anastomosis, whereby these fingers are irregularly swollen to fully double their natural thickness.

A little before the axillary artery becomes brachial, or just above the lower edge of the tendon of the latissimus dorsi, the vessel becomes abruptly dilated to fully four times its natural diameter. The dilatation is of the entire circumference, and extends about two inches along the brachial artery; its calibre is tolerably uniform or cylindrical, except that on its anterior and internal surface it assumes a form somewhat irregular or nodulated. Above this dilatation, as far back as can be traced by the finger, the vessel, though not considerably dilated, feels larger than is natural, or than its corresponding portion on the opposite side. About two inches below the commencement of this dilatation, the artery as abruptly contracts. The contraction is

such as to convey the idea of a cord having been tied tightly around the vessel. Immediately below this contraction the vessel appears again to dilate, but not in its entire circumference; a pouch or sack, somewhat of the size and form of a split hazel-nut, occupies its anterior and internal surface. Between this sack and the vessel there is an obvious communication, the former being readily emptied by pressure. Below this last described tumour, till pretty near its bifurcation, the artery is of uniform calibre. It is somewhat, but inconsiderably, larger than the corresponding portion in the opposite extremity. From just above the internal condyle to its bifurcation, the the vessel is again uniformly dilated to fully double its natural dimensions. The radial and ulnar arteries are distended to pretty nearly twice their natural size, uniformly throughout their entire extent.

On the posterior and internal portion of the fore arm, corresponding to about the middle of the ulna, is a soft, compressible tumour, slightly pulsating, and in size somewhat about that of half an ordinary sized walnut. In the palm of the hand, immediately beneath the pisiform bone, is an ill-defined pulsating swelling, which resembles an aneurism by anastomosis; beneath this, and corresponding to the cleft between the middle and index finger, is a tumour of a similar nature, somewhat less in size, and less distinctly pulsating.

Pulsation is visible immediately above the sternum, along the brachial, the radial, and the ulnar arteries; in the tumour on the back of the fore-arm, and in those in the palm of the hand. Pulsation is not visible in the carotids, nor in the tumours on the little and ring fingers.

By pressure applied to the axillary artery all pulsation in the tumour is arrested. Fremissement is well marked along the brachial, less distinctly along the radial and ulnar arteries. On taking the patient by the hand, and using gentle pressure, a tremulous purring sensation is communicated by the tumours in the palm.

On applying the stethoscope immediately beneath the acromial end of the clavicle, there is heard an intensely loud continuous murmur. This sound becomes somewhat augmented at every ventricular systole. As the stethoscope is moved towards the sternum, the murmur becomes less and less audible. At no part of the sternum can this murmur be heard. The heart's sounds appear perfectly normal. A *bruit de soufflet* is audible along the entire course of the brachial, radial, and ulnar arteries. A murmur exactly resembling the placental soufflet is heard in the various pulsating tumours. Nothing abnormal can be recognised in any of the other vessels in the body.

The pulse at both wrists is 72, and regular; being, however, on the affected side considerably fuller and somewhat stronger than on the other.

The temperature of the affected limb (one of the symptoms the patient complained of as most distressing), was, when measured by the thermometer, always several degrees higher than that of the other. The amount of the difference was found to vary with the

condition of the circulation, being augmented by whatever produced an acceleration of the heart's action. Any slight excess of exercise, she states, causes the limb to be bathed in perspiration.

There is a dull, aching pain, of variable intensity, at all times present in the arm, from which some relief is experienced, as also a partial emptying of the vessels, and slight diminution in the size of the various tumours, by holding the arm in an elevated position.

The patient's general health does not appear to have suffered much; her strength is but little impaired, her appetite good, her bowels regular, and her sleep undisturbed. Her catamenia did not appear the last two menstrual periods, but had always been previously regular.

The patient's history is briefly as follows:

Her parents, and numerous brothers and sisters, are healthy. She has been married eight years, and has had five children, nothing remarkable as to hæmorrhage or otherwise having occurred at her confinements. Her circumstances being independent, she has never pursued a laborious life, nor employed her right arm in any way calculated particularly to fatigue it. She has ever considered herself healthy and strong, except that intestinal worms have been to her for some years a source of much trouble. She states that from childhood, so far back as she can recollect, she thinks she had observed the veins of the effected arm and hand to have been larger and more swollen than those of the other; but having experienced from this no inconvenience, she never attached to it any importance. About a year and a half ago, she, for the first time, observed a throbbing to occur in the effected arm after exertion, or increased exercise of any kind. Somewhat about the same time, as well as she can recollect, she first felt a sharp stinging pain occasionally shooting down the arm, commencing, as she describes it, at the inferior angle of the scapula, and shooting through the arm to the hand. For some time she attached but little importance to these symptoms, the pain being but occasional and momentary, and the throbbing caused alone by exertion. Since then to the present time they have been gradually becoming more distressing; the occasional sharp stinging pain has been replaced by one constant, dull, and aching; while the throbbing and distressing sense of heat, which at first was brought on alone by excess of exercise, is now ever present, even while at rest. She can give no definite information as to the period of the first appearance, or the progress of the various tumours, but is of opinion that they have all formed within the last eighteen months. She has had much medical advice, having consulted several physicians, and having been for some time in hospital previously to coming into Steevens', but is of opinion that she has derived but little benefit from treatment.

For the sake of brevity, a detail of the daily treatment has been omitted, the more especially as it appeared to exercise but little control over the disease. It consisted for the most part, of general sedatives, with the local application of refrigerating lotions, and the occasional employment of pressure,—pressure generally of the entire

limb, and specially on the distinct tumours, varying its position and degree as appearance indicated. The latter part of this treatment required caution, as also a prolonged interval between the periods of its employment; for, even when inconsiderable, it soon caused no slight augmentation of the patient's sufferings. Most relief appeared to be derived from cold applications to the limb.

At the expiration of somewhat more than two months, the patient, at her own request, left hospital, having apparently derived but little benefit from its treatment.—*Dublin Quarterly Journal.*

A Case of Enlargement of the Thyroid Gland, treated by Seton. By Henry Kennedy, M. B.—In November, 1845, a woman, aged 35, applied to me on account of an enlarged thyroid gland. She had been married nine years, and had four children; she has lived of late years in Dublin, and has always been healthy in every respect excepting the disease she applied about. The gland had begun to enlarge so far back as the year 1832, thirteen years before my seeing her. At first it had increased very slowly; but the last year or so, she said, it grew more rapidly. When I saw it the tumour was at least the size of the largest orange; it was very hard to the touch, as if it were solid, but was divided into two portions, of which that on the right side was much the largest; it did not vary in size at the menstrual periods. It was not, however, on account of the bulk of the tumour, for in that respect there was nothing remarkable, that the patient applied for relief, but because it had affected her swallowing from a very early stage of its growth; and this symptom had latterly become much more distressing: solids were more difficult to get down than fluids, as might be expected. She referred the obstruction to the seat of the tumour. She told me she had shown it to other medical men, but she considered it still increasing. I ascertained that iodine had lately been used, both internally and externally for some weeks.

Under all the circumstances of the case, the tumour and dysphagia on the increase, and iodine having got a full trial, I determined on some more decided line of treatment, the more readily as the patient herself was most anxious that something should be done. The plan by seton seemed to hold out the best prospect of success, and it was carried into effect, having previously brought the general health into the best condition. The first seton was passed on the 30th of November, 1845. A common curved needle of the largest size, with its eye nearly full of doubled silk thread, was passed from below directly upwards, through the anterior portion of the tumour, about half an inch from the middle line of the neck, and including a space of at least one inch and a quarter between the entrance and exit of the seton. This was then fixed so as to prevent its slipping out, and the patient was desired to keep a poultice constantly applied, and also to keep her bed for two days; no bad effects followed. It is enough to state here that this first seton was withdrawn in ten days; that at the end of a fortnight a second one was passed; that it was double the size of the first, and its introduction was followed by a very considerable de-

gree of constitutional iritation, which, however, subsided in about four days; suppuration then became very fully established, and the second seton was withdrawn, after being in twelve days. With the exception of poulticing, nothing was done during the next four months. In this time considerable changes had taken place in all the anterior portion of the tumour, and that part of it which occupied the left side; it had become very hard, and gradually, but steadily, diminished in size. The larger portion of the tumour, however, occupying the right side of the neck, remained stationary. It appeared, indeed, as if it had grown somewhat larger; but this was not certain. A third and last seton was passed through this portion of the tumour in the month of April, 1846; its direction was upwards and outwards, so as to take in the longer axis of the swelling. This seton was four times larger than the previous one; it was passed with a large packing-needle, with the edges and point properly ground. After sixteen days the seton was withdrawn, the suppuration being then very considerable. Finally, after four months more, the entire tumour had so much lessened, that it might be considered as cured. The entire process occupied between eight and nine months.

At the present time (January, 1847), the eye cannot detect any tumour, but to the touch one remains, which is probably the size of a small chesnut. There is no deformity whatever, and very trifling marks of where the setons had been passed. The patient, too, feels no difficulty of swallowing, at least none that causes any inconvenience.

As I wish here to confine myself merely to the facts of this case, I have purposely omitted the consideration of several points which might fairly admit of discussion; such as the nature of the tumour; the question of a more general use of this plan, after the more ordinary means have failed, particularly iodine; the nature of the dysphagia, as to whether it was nervous or mechanical; the causes of those enlargements, and other points connected with the subject in a general way. It is to Quadri, of Naples that we are indebted for the plan of treatment put in force in the present case. Not being certain of what the result of the treatment would here be, I did not take the precaution of getting a cast of the tumour when it was of large size. This, probably, is of less consequence, as the patient has been seen by several gentlemen, to whom I may here refer. Dr. Clarke, of Herbert-street, saw her repeatedly; he took much interest in the case, and kindly gave me his assistance. At a late stage, and after all the setons were withdrawn, the patient was seen by several physicians and surgeons of this city.—*Ibid.*

Poisoning by Sulphuric Acid.—On Monday, Dec. 29th, 1845, a boy, aged 9, was admitted into the London Hospital, under Dr. Little, suffering from the effects of oil of vitriol. He was at play in the street, when a strange boy give him a teaspoonful of it to drink; he swallowed about an ounce of the acid, and was instantly seized with excruciating pains in his throat and stomach. He ran home, and,

according to his father's account, looked as if somebody had been smearing his lips with white paint. He was carried as quickly as possible to a neighbouring surgeon, who administered a great quantity of chalk and magnesia; five minutes, however, must have elapsed before anything was done. His father then brought him to the hospital, and he became very sick, throwing up a quantity of brownish matter, from which the chalk readily subsided, leaving a supernatant liquor, strongly resembling porter; it was chiefly mucous, charred by the sulphuric acid. He appeared to be suffering a great deal, the countenance was anxious and deadly pale, the extremities cold, and the pulse scarcely perceptible. Under active treatment he rallied, and in about seven hours fell into a quiet sleep; he passed a very comfortable night, and got out of bed twice to void his urine. In the morning, the countenance still looked anxious; he complained of pain in his throat and stomach, though it was not increased by pressure; the lips were swollen, and surrounded by reddish-brown scabs, the effects of the acid; the tongue also was covered with a pearly-white epithelium, which had already begun to peel off from its sides, the skin was hot and dry; the pulse one hundred and thirty-two, hard and jerking. He was ordered albuminous food, and two leeches were applied over the top of the sternum. This febrile condition lasted for four days, the skin remaining hot and dry, and the pulse quick and jerking; during this time he was copiously salivated, and he spat up a great deal of white, shreddy epithelium; the urine was high coloured and increased in quantity, while the bowels remained obstinately constipated. On the fifth day an active purgative relieved them, and from that time he gradually got well. The urine which he voided during the first four days of his illness was submitted to chemical analysis. Its quantity was greater than natural; it had a deep red colour, a strong acid reaction, and a specific gravity varying from 1046 to 1030; it did not contain the least trace of albumen, but held so much of the triple phosphates in solution; that on neutralizing with ammonia they were thrown down in the form of a copious white precipitate. On testing for sulphuric acid, there was found, on the first day, a quantity equal to sixty-two grains of the strongest oil of vitriol; on the second day, forty grains; on the third day, 18.3 grains, and on the fourth the equivalent of 12.7 grains. The urine was not examined on the following day, but on the sixth it had again become natural. In all, therefore, 133 grains of monohydrated sulphuric acid were thus got rid of—a quantity which is about equal to an ounce and three-quarters of the dilute acid of the London Pharmacopœia.

The case offers the following peculiarities:

1. That he should have recovered after the poison had remained so long in the stomach.

2. Its detection in the urine shows that the acid had been absorbed.

3. Its action was almost entirely local, the only constitutional symptoms being a little fever with copious diuresis.

4. That the duty of getting rid of the poison rested with the kidneys.

5. That as much as, or rather the equivalent of, 133 grains of the strongest oil of vitriol should be permitted to circulate with the blood of a child nine years old without producing any very dangerous consequences.—*Lond. Med. Gaz.*

Polypus of the Rectum. By Mr. Syme.—Sir A. Cooper states, in his Surgical Lectures, that "in the course of his life," he met with only ten cases of polypus of the rectum.

Some time ago, I met with five cases in the course of a single fortnight—two of them in adults, and three in children—and I have seen a sufficient number of other instances of the disease, to satisfy me that it is not by any means so rare as has generally been supposed. It presents itself in three different forms, of which one usually occurs in childhood, and does not appear much beyond puberty. A gentleman now established in practice, not far from Edinburg, when attending my lectures—then I suppose about eighteen or nineteen years of age—applied to me for the removal of a polypus, such as is met with in early life; with this exception, I never met with it beyond the ninth or tenth year. It is extremely soft vascular, of a florid red colour, and assumes the form either of a worm from two to four inches in length, or of a strawberry with a connecting footstalk two or three inches long. This tumor seldom protrudes except when the bowels are evacuated, and then admits of ready replacement, although not without occasional hæmorrhage, which may be of considerable amount. The vascularity of this growth, and its attachment above the sphincter, made me averse from removing it by excision; and Sir A. Cooper has mentioned the alarm that was on one occasion excited in his practice by doing so. I have always employed the ligature; and though the soft structure readily gives way when the thread is drawn, bleeding has never occurred in a single instance, or any other symptom in the least degree disagreeable resulting from this mode of removal; I am therefore induced to regard it as the best that can be employed.

The disease appears in adults in two very distinct forms. In one of these, the growth is soft, vascular, prone to bleed, lobulated or shreddy, and malignant-looking, so as on the whole to resemble very much the cauliflower excrescence of the os uteri, but possesses a peduncle or foot stalk of firm texture, capable of sound cicatrization after being divided. The profuse, frequent, and protracted bleeding which proceeds from this sort of growth, renders its removal an object of great consequence; and this may be effected very easily, and with perfect-safety, by transfixing the radical cord of connexion with a double ligature, tying the threads so as to include a half of it in each, and then cutting it across a little below the constricted part. In a patient of Mr. Craig of Ratho, (who detected the disease from the great hæmorrhage it occasioned,) I could not accomplish protusion of the tumor, but guided a ligature on my finger, and tied it on the neck within the rectum. It is more satisfactory to force or draw the swel-

ling beyond the sphincter, so that the sound and morbid parts may be distinguished with certainty, and this can usually be done with great facility, although the growth has attained a large size. In a hospital case recommended by Mr. Anderson of Castle-Douglass, I brought into view and removed a tumor not less than an orange, which had a most malignant aspect, and had nearly exhausted the patient by hæmorrhage.

In the other form which polypus of the rectum assumes in adults, the tumor is of a firmer consistence, smoother surface, and more regularly spherical or oval form, so as to resemble the growth which in general constitutes *polypus uteri*. The symptoms resulting from this simple swelling are rather annoying than seriously alarming; and the patient, therefore, is apt to delay requiring assistance for a long while. In the case of an old lady, whom I saw with Mr. Hilson of Jedburgh, the tumor was about the size of a cherry, with a long stalk, and we were assured had protruded every time the bowels moved for twenty years. In another case, a gentleman whom I saw with Dr. Johnston of Cumnock, the tumor was nearly as large as an egg, had a cuticular covering, and appeared to have existed for a period equally long. I have always removed these growths in the way that has been already described, and never met with the slightest consequence of a disagreeable kind.—*Lond. and Ed. Month. Jour. of Med. Science.*

Pain in the Side, in thoracic inflammations, generally corresponds, according to the indication of the patient, not to the precise point of the organ affected, but to one a little below it,—that is, the painful sensation experienced is in a situation inferior to the lesion. When local evacuations of blood, therefore, are ordered, or blisters, they should be directed to be applied a little higher than the painful part—(*Rostan.*) This precision is not without importance in certain cases, for it may happen that, following the indication of the patient, remedies are often applied to the abdomen, when the disease is at the lower part of the chest.—*Ibid.*

Sugar in the fluid of Ascites in a Diabetic Patient.—In the fluid from the abdomen of a diabetic patient who was attacked with ascites, Dr. Landerer detected evident traces of the presence of sugar. The existence of this substance is almost all the secreted fluids in the body of persons affected with diabetes has now been proved.—*Heller's Archiv.*

Operation of Gastronomy for the Relief of Internal Strangulation.—We are informed that the operation of gastronomy has been recently performed by Mr. Hilton, of Guy's Hospital, with complete relief to the intestinal obstruction, in a man, twenty years of age, suffering from internal strangulation of a large portion of ileum of twelve days' duration. The point of obstruction was situated about twelve inches from the cæcum. The patient died of exhaustion a few hours after

the operation. Full particulars of the case will shortly be given at the Medical and Chirurgical Society.—*Lond. Med. Gaz.*

Fatal Effects of Ether Vapour on Animals.—M. Gruby found, in his experiments on ether-vapour, that dogs twenty days old lost their sensibility in from eighteen to twenty minutes. Grown-up dogs lost the power of sensation in eight minutes, and died if the action of the ether was continued for forty-five minutes. The dogs recovered their sensibility and motion when they were exposed to the air, if the experiment with the ether was not prolonged beyond eighteen minutes for the young, and forty to forty-four minutes for the adults. Young dogs, which had ceased to breathe, were brought to life by copious bleeding from the jugular vein.—*Ibid.*

Medical Controversies.—Dr. Cheyne remarks, in reference to a work which he wrote against a treatise by M. De Moivre, that, "being written in a spirit of levity and resentment, I most sincerely retract and wish undone, so far as it is personal or peevish, and ask him and the world pardon for it, as I do for the defence of Dr. Pitcairn's Dissertation on Fevers against the late learned and ingenious Dr. Oliphant. *I heartily condemn and detest all personal reflections, all malicious and unmanly terms, and all false and unjust representations*, as unbecoming gentlemen scholars and Christians, and disapprove and undo both performances, as far as in me lies, in everything that does not strictly and barely relate to the argument."—*Life of Dr. Cheyne.*

Many modern controversialists of the medical profession might profit by the example of this candid old physician of the seventeenth century. Nothing can more strikingly show the absurdity of indulging in violent controversies on medical subjects, than the utter indifference of another generation to them, and the complete oblivion into which they sink in a course of a few years. But medical writers are of an *irritabile genus;* and it is a rarity to meet with such an example of candour and good feeling as that shown by Dr. Cheyne.—*Lond. Med. Gaz.*

Fever in Ireland.—Fever is rapidly extending its ravages even in Dublin. The Cork-Street Hospital, one of the largest establishments of its kind in Ireland, is literally crammed with patients, to such a degree of inconvenience, indeed, that the governors have given directions to have temporary buildings—if sheds or tents can be so called—prepared for the reception of numerous patients for whom there is no accommodation within doors. The state of the Meath and Richmond Hospitals is equally deplorable, and the accounts from all parts of the country represent disease and destitution proceeding at an equal pace.—*Ibid, from Times.*

Honours Conferred on Medical Men.—The Queen of Spain has created Professor Orfila a Knight of the order of Charles III. Her

Majesty has also made him a dignitary of Spain by a special ordinance. These honours have been conferred on the eminent French Professor in consequence of his having completely remodelled the medical institutions of Madrid. In this reform, Orfila appears to have accomplished a miracle; for he has actually succeeded in satisfying *all* branches of the profession! When we have another medical reform bill under discussion, it would be desirable to secure his services for Great Britain.

Don Pedro Castello, chief physician of Isabella II. has also been made a Knight of the Order of Charles III. and has had conferred on him the title of *Marquis of Health* (*de la Salud.*) As our French contemporary remarks, this must be a great recommendation to patients, but it is only reasonable to expect that the Esculapian marquis himself will henceforth be free from all attacks of sickness! The creation of this extraordinary title is in accordance with a strange practice prevalent in Spain, of fixing upon some quality or virtue in raising to the peerage an individual who may have no territorial possessions. Hence, among non-professionals, we find Dukes of *Fidelity and Victory;* and for the first time, we believe, among professional men, we have the creation of a Sanitary Marquisate!

Don Pedro Maria Rubio, another eminent Spanish physician, has been created a Knight of the Royal American Order of Isabella the Catholic.—*Ibid.*

Secret of Success in Medical Practice.—Skill and art alone are not sufficient. He (a medical practitioner) must be particularly mindful of his conduct. It is this which recommends him to the public, and creates confidence; for as the generality of people are incompetent to pronounce on his science, it is natural for them to take the measure of his ability from the measure of his conduct. By force of conduct alone, a physician, of very moderate talents, may become the favourite of the public; and without it, the most skilful professional man remain unnoticed and unappreciated.—*Lond. Med. Gaz. from Hufeland.*

Funeral of Professor Tommasini.—The funeral of the late Prof. Tommasini is said to have taken place recently at Parma with imposing splendour. The whole of the court, and more than three hundred families of distinction, were present at the ceremony. The members of the various medical faculties, and all the dignitaries in the army and in the state, were among the followers. The leaden coffin was borne to the church of the Campo Santo by the students of the Faculty of Medicine. The funeral took place at night, and as the procession passed through the streets, the front of each house was illuminated by torches, the last testimony of the sorrowful respect and gratitude of a nation.—*Ibid, from Gaz. Med.*

Adipocire.—By the courtesy of our friend Dr. Blakeman, of Bleecker street, we were invited, a few days since, in company with

Drs. Miner, Senr., J. K. Rodgers, A. C. Post, Linsley, F. C. Stewart, Borrowe, Williams, Rockwell, A. E. Hosack, &c., to inspect the body of a Mrs. F., which had been disinterred from a burying ground in Twelfth street, in which it had lain for 17 years. It was that of a very large woman. The coffin in which it had been enclosed was very little affected by its inhumation. The form of the cadaver was perfectly preserved. The extremity of the nose was gone, and the features of the face partially discernible. The arms, which were placed along the sides, had become much compressed by the swelling of the body, and the hands had broken off at the wrists. The remains of one hand, upon the right side of the abdomen, were distinctly visible, and the forefinger, with its nail, was entire. The rotundity of the breast was perfect—the abdomen flattened, as if by compression against the lid of the coffin. The left foot, like the hands, had separated from the ankle. The rotundity and shape of the thighs was remarkably preserved. The shroud adhered to the body and was not decayed, though discoloured. The cadaver presented a greenish hue from mould, with which it was covered, and a fresher coat of pure white, had been deposited upon it since its exposure to the air. The cap was distinct upon the head, and the bow of black ribbon on one side, somewhat faded, remained. By the consent of a son of the deceased, who was in possession of the body, a piece about a foot square was cut out of the abdominal walls, by Dr. Post, so as to expose the cavity. The knife passed easily through their substance, which was found to consist entirely of a yellowish cheesy substance. The thin layer of abdominal muscles could be discriminated, similarly converted beneath the adipose layer, which was very thick. The inner surface of the abdominal cavity was smooth. The viscera and a large lump of adipocire, lay at the bottom. The diaphragm was distinctly seen. Below it, and towards the left, much shrunken and condensed, and having the consistence, somewhat, of lung, lay the liver. The stomach, having its natural form and a macerated appearance, was distinctly visible, and some portions of the colon, collapsed and membranous, were discoverable. This was all that could be seen within the abdominal cavity through the aperture that was made. The exsected piece of abdominal wall was then replaced. An odour closely resembling that of gum ammoniac, exhaled from the body. We learn that the soil in which the coffin was interred, was sandy, and not moist; and that two bodies of children buried over it, and others in the vicinity, were in a state of complete disorganization. Some finger-bones, lying loose in the coffin, were taken up, and found so much softened as to be cut easily, but not altered in form. The shavings which the coffin contained, were blackened, but otherwise unaltered. The subject was 69 years of age, very fat, and weighed 170 pounds. The disease of which she died has escaped our recollection. The conversion of the human body into adipocire, though rare among us, has been not unfrequently met with. A body in this state of preservation was exhibited some time ago, at one of our public museums, coming, we believe, from Canada.—*N. Y. Annalist.*

Sick and Disabled Seamen.—One of the late Congressional documents comprises a letter from Dr. Ruschenberger, Surgeon to the U. S. Naval Hospital in New York, to a member of Congress, relative to the expenses of the Marine and Naval Hospitals. From it we make the following quotations respecting these important institutions.

"By an act approved July 16th, 1798, a tax of twenty cents monthly was levied on the pay or wages of all seafaring people; and, in consideration of the payment of this tax, collectors of ports are directed in the same act to 'provide for the temporary relief and maintainance of the sick or disabled seamen in hospitals.' Under this law all seafaring people who pay this tax, or 'hospital money,' are entitled to the 'relief' specified or intended.

"The rate of the tax thus levied is very heavy, as may be seen by comparing it with the amount of seamen's resources. For example, in the navy the total pay and emolument of a seaman are, annually, $144, and rations $73; equal to $217. From this sum he pays yearly $2 40, or more than one per cent, (1.10) on his total income. This is not an income tax, nor a property tax, but a tax upon the liability to misfortune of a class whose pursuit is eminently perilous to health and life.

"An act approved March 2d, 1799, levied the same amount of tax (to be applied in the same way) on persons serving in the navy. Officers, seamen and marines under this act were entitled to the same advantage as sailors in the merchant service. The fund resulting under the operation of these two acts constituted the '*marine hospital fund.*'

"By an act approved February 26th, 1811, the moneys, or tax collected from persons serving in the navy, were separated from the marine hospital fund, and constituted a fund under the title of 'navy hospital fund.' As no person in the navy had derived any advantage from the marine hospital fund between the years 1799 and 1811; and as it was fairly shown that the navy had paid at least $50,000 into it, this sum was taken from the marine hospital fund and paid over as the foundation of the navy hospital fund. By the act of 1811 the Secretary of the Navy, the Secretary of War, and the Secretary of the Treasury, were constituted commissioners of this fund; but, by an act approved July 10th, 1832, the Secretary of the Navy became the sole commissioner.

"The act of 1811 provides not only for the temporary, but also for the permanent relief of the sick and disabled officers, seamen and marines; and under its authority the naval asylum at Philadelphia was erected."

"From public documents I learn that the aggregate of hospital money collected from the merchant service for the year 1842 was $72,429 32, and the expenditure for the same year was $93,531 68; that the expense of sick and disabled seamen in the merchant service exceeded the receipts $21,102 36 for the year 1842, and for the half year ending June, 1843, the expenditure exceeded the receipts $9,129 77. Last year $25,000 were appropriated by Congress to

meet the deficit of the marine hospital fund; and unless some means be devised to prevent this annual deficit, it will probably increase from year to year."

Dr. R. suggests several modes of reducing the expenditures of the marine hospital fund, and also of increasing the receipts of the navy hospital fund, but we believe no action was had by Congress on the subject.—*Boston Med. and Sur. Jour.*

Medical Appointment in the Regular Army of the United States.—To persons desirous of entering the medical staff of the regular army, the following information from a responsible source will be acceptable:

It is prescribed by law that "no person shall receive the appointment of assistant surgeon in the army of the United States unless he shall have been examined and approved by an army medical board, to consist of not less than three surgeons or assistant surgeons, who shall be designated for that purpose by the Secretary of War."

Applications for permission to be examined for the appointment of assistant surgeon must be addressed to the Secretary of War; must state age and residence of the applicant; and must be accompanied by respectable testimonials of his possessing the moral and physical qualifications requisite for filling creditably the responsible station, and for performing ably the arduous and active duties of an officer of the medical staff. These proving satisfactory, invitations are accordingly sent to the applicants.

The medical board of examiners rigidly scrutinizes the pretensions of each candidate, taking into consideration his physical qualifications and moral habits, as well as his professional acquirements; and reports favourably upon no case admitting of a reasonable doubt, as the health and lives of the officers and soldiers are objects too important to be committed to ignorant and incompetent hands.

Section 8 of the army bill, approved February 11, 1847, authorizes the appointment of "two additional surgeons and twelve additional assistant surgeons in the regular army of the United States." After the promotion of two assistant surgeons to the advanced grade of surgeon, and the appointment of the candidates who were examined and found qualified by the last medical board, there will still remain nine appointments of assistant surgeons to be made under the provisions of the section just quoted.

An army medical board has accordingly been ordered to convene in the city of New York on the 15th of this month (March,) for the examination of such candidates as may be authorized by the Secretary of War to present themselves. Applicants from a distance are notified that, as the board will probably be in session for a month, they will be in time if they present themselves three weeks after the board shall assemble.—*Nat. Intel.*

Theatrical Performances at the New York State Lunatic Asylum. By D. Tilden Brown, M. D., 2d Assistant Physician.—Among the

moral agents employed in all well-regulated Asylums for the insane, to divert the deranged mind from its morbid concentration, by giving new direction to thought, and suggesting new sources of contemplation, amusements deservedly hold a high rank; and every appliance which conduces to gratify or create a capacity for enjoyment in the unhappy lunatic, however humble in itself, becomes a valuable adjuvant in the process of restoration. Varied as it may be by periodical diversions and occasional festivals, the hospital residence of the insane is necessarily, in a degree, monotonous and insipid. Separated by affliction from the world, with its ties, affections, and pursuits; excluded by misfortune from the usual sources of rational happiness, much of their life is passed in the gloom of despondency; in inward struggles with their emotions; in revolving cherished delusions; or in groping amid the darkness of fatuity. In removing or mitigating such conditions, mirth and recreation, no longer frivolousor puerile, become dignified as instruments of cure. They not only prove serviceable by presenting temporary enjoyment, but by creating a future in the mind absorbed in gloomy retrospect, or present wretchedness, and by furnishing cheerful attractions to the memory of those who drown all recollections of the past in apprehensions of impending evils. They impel the patient to the exercise of self-control, both by suggesting that propriety of behaviour which will secure participation in such privileges, and by engaging the attention to the exclusion of irrational thoughts. Though by some miserable victims of hopeless despair, all attempts to arouse their cheerfulness are viewed as cruel mockery of their sufferings, to many, such occasions are sources of unalloyed pleasure; and the aggregate gratification experienced by the insane in any entertainment, is probably but little less than would be manifested by an equal number of their more sane brethren.

With such an estimate of their value, the guardian of the insane seeks to accumulate sources of amusement that he may alleviate confinement and ennui, and at the same time so vary recreation that it may not satiate by its monotony. He thus opens a new world of pleasure to his charge, presenting enjoyments adapted to their mental condition, and their capacity to appreciate them. The character of these amusements is varied by manifold causes. Thus the whole system of recreation of any Asylum, may be influenced or decided by the temperament of its Superintendent; by the social position and former occupation of its inmates; or by the locale of the institution itself; while numerous minor agencies will affect the details of its operation. As a class, the amusements of the American Asylums rarely differ in a material degree, but a few find both advocates and opponents among the medical officers. Dancing, social parties, permitting the commingling of the sexes, fairs, and attendance on public entertainments, have been successively opposed and defended. When, however, it is remembered that many of the insane are but little separated from the rest of the world in their sense of propriety and correctness of deportment, there seems no reasonable objection, provided the indulgence

be limited to this class, to a participation in those amusements which employ so much of the time of the sane world.

In this country, where the utilitarian spirit of the national character exhibits itself, even under the disturbing influences of mental alienation, employment in industrial pursuits, as a moral agent in the treatment of this disease, proves far more efficacious, and in general, more alleviating to the patient than mere recreation. In northern latitudes, however, such occupation is generally confined, by the severity of climate, to a comparatively small portion of each year; and although some branches of industry employ a limited number of patients during the tempestuous season, reliance is mainly placed on those ornamental arts and intellectual diversions which may be comprised in the term amusements. But these, of themselves, become agreeable and inviting occupations, arousing the inert, and tranquillizing the irritable. In their nature, they should be such as will engage, without exciting, those to whom they are addressed; and, while permitting that restraining surveillance which their conditions require, will insure cheerfulness and mirth. Of the numerous source of amusement, combining present gratification and prospective benefit, which are available in an Asylum, none, perhaps, presents more decided advantages than dramatic representation. All the necessary *materiel* exists within the precincts of the institution itself, requiring only to be developed and set in operation. Among the throng which fill its halls, move the author and the actor, waiting only to be discovered by the discriminating tact of their guardians. There is the genius to create, and the talent to pourtray scenes of humor, sentiment, and pathos. From such convictions, the attempt has been made at the State Lunatic Asylum, during the present winter, to produce the exhibition of theatrical performances by the patients, for the twofold purpose of engaging some who pertinaciously object to all other employment, and offering an agreeable diversion to many others. These efforts have been attended with gratifying success, and the representations have realized the most sanguine hopes of the projectors. Original plays have been produced and enacted solely by the patients, and the approval of competent judges has pronounced the matter and the impersonation to be meritorious. The hope of approbation undoubtedly stimulated some to engage in this project, who might otherwise have declined; and the presence of the Managers of the Asylum with their families and friends, and, on one occasion, that of the Governor of the State, has gratified the desire, and fairly tested the feasibility of this enterprise. Although the performers consisted entirely, and the spectators mainly of patients, it is believed that an eyewitness of the scene, unconscious of these facts, would have discovered no indication thereof throughout the performance, or would have credited the assurance that the actors before him, and the spectators about him, were isolated from the world as victims of insanity.

The plays enacted thus far have been mostly humerous; caricatures of the follies of the age, burlesques on national characteristics, and ludicrous exhibitions of individual and sectional peculiarities. There

can be little doubt, however, that with the assistance of suitable appliances, pieces of higher pretensions, vaudevilles, melodramas, &c., might be successfully attempted.

Some patients have evinced a felicity in the conception and impersonation of the characters assigned them, not unworthy of professed representatives of the histrionic art.

Seventeen patients have assisted in these performances, some of whom have since recovered and left the institution. Others are convalescing, while to a smaller number, the Asylum will probably always prove a better home than the world with its turmoil can offer. Among these were individuals who believed, or had recently believed themselves to be the especial ministers of Divine will; exalted personages, Roman Pontiffs, or Secretaries of State; that by a wave of their hand they could control the movements of railroad trains, and vessels on the high seas; who had, previous to admission, been confined in chains, as dangerous, from their homicidal propensities; who insisted on their own idiocy and "inability to think," even while engrossed in the study of their parts; or whose ordinary conversation denied all attempts to trace coherence or point.

No injurious effects have, thus far, been discovered, and none are apprehended from the continuance of these diversions, if proper discrimination in the selection of performers, and admission of spectators, be exercised. On the other hand, undoubted benefits have accrued from the intellectual application, mental discipline, exercise of memory, and self-control of the performers, and from the diffusion of good humor and hilarity among the observers. The success of this attempt to remove the barrier which has hitherto debarred the insane from enjoyments of this nature, thus assimilating their condition more nearly to that of their sane brethren, is alike gratifying to the philanthropist, interesting to the philosopher, and encouraging to those whose duty and pleasure it is to "minister to minds diseased."—*N. Y. Annalist.*

Affection of Peyer's Glands in Adynamic Fever.—At a meeting of the New York Medical and Surgical Society, January 23d, Dr. Swett stated that he had lately had three cases of Typhus, throwing some light upon the pathology of the diease, especially as to the condition of Peyer's glands. The patients arrived in a vessel in which the disease had been very violent, the captain and all the sailors having suffered from it. In the first patient, no ulcerations were discovered, but some patches of Peyer's glands, near the ileo-cœcal valve, were enlarged and discoloured, being of reddish brown hue. In the second, a girl of 20, who had the ordinary symptoms, the glands of Peyer were very much inflamed and ulcerated. The third case was that of a boy, attacked in a week after landing, who had suffered much privation. At the time of his entrance into the Hospital, he was exceeding prostrated. Stimuli were given at once, and he improved considerably. He lived for a fortnight afterwards, and for the last week seemed constantly dying. A day or two before his death, lived discolorations of a linear form appeared about the upper part of the abdomen, as if

from the bursting of small veins. On post-mortem examination, no disease of Peyer's glands, whatever, was discovered, except that some of them were hypertrophied, the results, no doubt, of former disease. In the cœcum, there were about a dozen sloughing ulcers, irregular in shape, the largest of them about the size of a five-cent piece. Taking the three cases together, it appears that the disease, although of common origin, may or may not be attended with ulceration of Peyer's glands. This is in accordance with the opinion of the English, and opposed to that of the French Pathologists.—*Ibid.*

Professor Dudley's Operation for Stone by Lithotomy.—(Western Lancet, Jan., 1847.) Professor Dudley has recently performed the operation for stone in several instances, and with his usual success. He has now performed the operation on *one hundred and eighty-nine persons*, of whom one hundred and eighty-four have recovered. The last case from which we received particular information, recovered in less than a week. Twelve hours after the operation, the urine passed by the wound for the last time, and union by the first intention took place perfectly.

This remarkable success has not been attained by a *selection* of cases; on the contrary, we have the best authority for the declaration that he has operated on nearly every case that has been presented. He performs the lateral operation, and always employs the gorget.—*Southern Journal of Medicine and Pharmacy.*

A Case of Idiopathic Tetanus, treated successfully by Strychnine. By Edward Vanderpool, M. D. (New York Jour. of Med. Jan., 1847.—Was requested to see Mr. B., aged 58 years, segar merchant. Just one month ago he thought he took cold from sitting in front of his store in the evenings, from a chilliness creeping up the sides of his face, which continued for several days. This was followed by a sore feeling of the face, near the ears, and inability to extend the jaws, with a difficulty of swallowing. About this time, he commenced to fall backwards when walking, which he would do every few days from a sudden spasmodic opisthotonos attack. Two days ago he fell suddenly, in the same way, through the lower half of a window, breaking out both the sash and the glass, but without injury to himself.

I found him with tetanic expression of countenance, permanent rigidity of the masseter and temporal muscles, jaws nearly closed—could only show the edge of the tongue at its tip, which was much bitten, by being caught between his teeth whilst dozing—is frequently drawn, or, if standing, thrown backwards by spasmodic action of the muscles of the back. Bowels soluble. Pulse eighty, and soft. Has taken several cathartic doses of calomel since he felt unwell, and "a number of sweats." Prescribed strychnine in solution, the sixteenth of a grain every two hours.

14th October.—Doctor Fell happening to call on me, I invited him

to see the patient. 10 o'clock, A. M.—Took only three doses yesterday and one this morning. Found him with a handkerchief tied around his waist from bad feeling in the region of the diaphragm—produced, as he supposed, by a fall an hour before—rigidity of the jaws about the same; his teeth are worn off, to appearance one-eighth of an inch—thus allowing for the distance he can open his mouth. Spasms more frequent; takes fluid nourishment well. Bowels have moved. ℞. Stryc., one-fourteenth of a grain every two hours. 7 o'clock, P. M.—Jaws have yielded a little, but spasms have been very frequent. ℞. Stryc., one-twelfth of a grain every two hours.

(This treatment was continued with a gradual abatement of the symptoms until the 20th, when the patient was convalescent. He was discharged cured on the 22d.)

Within the last two years, two other cases have occurred in my practice. The lamented young S. Fox, aged 19 years, from an injury whilst bathing, died the fifth day; having been treated with tart ant., assafœt., laudanum and brandy. The other, a coloured woman, two months subsequent to young Fox, recovered. Both were traumatic tetanus. The woman had the opisthotonos form, permanent rigidity, with occasional spasmodic aggravations—especially of the diaphragm—which caused excruciating suffering. The fifth day, her jaws having become firmly closed, I concluded to take the responsibility and bleed her to the extent of a large wash-basin full, when her jaws yielded a little—say ⅛ths of an inch—and this state of things I endeavored to maintain by tart. ant. She took 4 grs. in solution every hour and every other hour for two days without producing emesis, when, for fear of inflammation of the stomach, I suspended its use. Her convalescence was very slow, but her health has been good since.

N. Y., Oct. 10th, 1846.

P. S. Strychnine will not dissolve in water or alcohol. A good way is to add ʒj. acetic acid to ʒvij. aq., which will make a clear solution.—*Ibid.*

Fœtus, with left Arm partly amputated by the Funis coiled round it. (Dub. Quart. Jour. of Med. Scien., Nov., 1846.)—Dr. Beatty exhibited to the Pathological Society of Dublin, a preparation of a fœtus, of between the fifth and sixth months of utero-gestation, which he adduced in confirmation of the fact several years ago described by Dr. Montgomery, the spontaneous amputation of the limbs before birth. This specimen illustrates that process, and may help to explain why the fœtus is so often found maimed before it arrives at its full period. The left arm in this instance had been enveloped in a coil of the umbilical cord, which had so tightly constricted it as to cause the absorption of all the tissues with which it was in contact; this had occurred about the middle of the humerus, and, the soft part being removed, only the bone preserved the continuity of the limb.—*Ibid.*

Hospitals and Alms-houses in France.—The present number of hospitals or alms-houses in France is 1338, having a revenue of 53,632,992 fr. There are 39 institutions for the education of the deaf, dumb and blind youth of the kingdom, in which at present 1675 pupils are receiving instruction. The number of deaf and dumb persons in France is computed at 20,000 to 25,000, and the number of blind at 12,000 to 15,000. As to the *enfants trouvés*, the number cannot be accurately made out, but 123,394 have been received at the Foundling hospitals, of which there are 144, in a single year. The number of indigent lunatics is 12,286, who are supported by the government at an annual expense of 4,326,138 francs, and by humane and judicious treatment a large number of these unhappy beings are every year restored to reason, and to their families and society.—*Western Journal.*

Analysis of Gun-Cotton.—In a late English paper I observed an analysis of gun-cotton made by Professor Graham, of London. Exploded in a glass tube so as to collect the gaseous products, 53.33 grains of the cotton yielded 100 cubic inches of gas, of which the composition was as follows:

Carbonic acid, . . .	14.284, or 2 volumes;
Cyanogen, . . .	7.143, or 1 volume;
Nitric oxide, . . .	35.715, or 5 volumes;
Carbonic oxide, . . .	35.715, or 5 volumes;
Nitrogen . . .	7.134, or 1 volume.

Besides these aëriform bodies, a portion of oxalic acid is precipitated, and a considerable quantity of water results from the combustion. *Ibid.*

Small-Pox.—M. Béhier, one of the physicians of *La Charité*, Paris, has had during the last few weeks several interesting cases of small-pox in his service. A female, twenty-eight years of age, slept for some nights next to the bed of a patient labouring under variola: one morning, in making up a bed, she touched his person. Twenty days after she was seized with chilliness, followed by heat and a sensation of general lassitude, with pains in the loins, felt particularly in movements of the limbs. She complained of soreness of the throat, with tolerably intense oppression; the tongue was white, the eyes weeping, and the palate the seat of papulæ. The most remarkable phenomenon in this case, and it is on this account that I have reported it, was the form and volume of the pustules, which were small, pointed, resembling simple acne, and not presenting the appearance of pustules with wide bases which are observed in variola. This modification in the eruption alone gave rise to some fears of unpleasant complications. And this is a character which it is well to bear in mind, that whenever the pustules present themselves in this way, there is reason to anticipate an abnormal march, or some grave epiphenomenon in the disease. The third day a violent delirium declared itself; the

patient jumped out of bed and ran across the ward. She complained greatly of her throat: her pulse was at first 74; then 84; then 90. Six leeches were applied behind each ear. Calomel was given internally; two large blisters to the lower extremities, after having previously used sinapisms. The third day after the delirium the pustules became less distinct, and the symptoms improved. This is a remarkable fact—the patient had been vaccinated, and should have had varioloid; but, on the contrary, her symptoms were exceedingly grave. It is generally the case, when a patient who has been vaccinated is attacked with variola, that the disease is more mild than if vaccination had not been performed. An opinion prevails very extensively among physicians, that in variola the pustule is umbilical, or pointed, and that it is not so in varioloid. This is proved to be altogether erroneous. In variola, umbilical pustules are but rarely seen, and the only real difference between it and varioloid is in the time of desiccation. In the former, between the eruption and the desiccation, there is a distinct period, while in varioloid the pustules appear, become dry, and the scales are formed and fall off very rapidly.

There should be no importance attached to the umbilical shape of the pustules in these diseases, according to M. Béhier, who has made extensive and careful researches on the subject, both at *l'Hospital Saint Louis* and *l'Hospital des Enfans*, where he has had numerous opportunities of observing these diseases. As a general rule, variola does not offer umbilical pustules. The history of this patient, after her recovery from variola, shows the possibility of complications posterior to the principal affection. The parotid of the left side of her neck inflamed, and the abscess was opened. Erysipelas seized first this side, and afterwards the other, and was followed by anasarca, which commenced in the face, obstinate diarrhœa, and albuminous urine. The same remedy was employed in this condition, as in a similar case supervening upon an attack of scarlatina: vapour baths produced sensible amelioration of the symptoms.—*Ibid.*

Treatment of Hydrocele.—In the treatment of hydrocele, M. Blandin does not believe that the nature of the liquid injected into the vaginal tunic exercises any sensible influence upon the results of the operation. He employs, with equal confidence, the vinous decoction of roses de Provins, tincture of iodine, etc. It is only necessary that the liquid should possess irritating properties, in a sufficient degree to provoke an adhesive inflammation, in order that its use may be followed by success. He prefers a simple mixture of three parts of water to one of rectified alcohol. This liquid possesses the advantage of being always at the hand of the surgeon, and not requiring, as the vinous decoction does, a manipulation more or less tedious; and what is of more importance, it possesses over the preparations of iodine the advantage of leaving no stain on the instruments or on the linen of the patients.—*Ibid.*

THE

MEDICAL EXAMINER

AND

RECORD OF MEDICAL SCIENCE.

NEW SERIES.—No. XXIX.—MAY, 1847.

ORIGINAL COMMUNICATIONS.

Cold Plague, or Malignant Bilious Pneumonia. By James D. Rivers, M. D., of Hall County, Ga.

The February number of the Examiner contains an article extracted from the Southern Medical and Surgical Journal, in which the writer makes some remarks in reference to a disease "which has prevailed more extensively in Georgia and South Carolina (and perhaps in other Southern states) during the last year or two than formerly, and which has been attended with an extraordinary degree of mortality." The disease to which the writer alludes, under the name of "Pneumonia," or "Pleuro Pneumonia," is well known to the people of North Carolina, South Carolina and Georgia, as the "Cold Plague;" and from the little experience that I have had in some fifteen or twenty cases, I am induced to believe that this latter appellation, or the more scientific one of Malignant Bilious Pneumonia, is preferable to the one which the writer has given, and is more descriptive of the malady than any other name that has come to my notice. The disease called the "Black Tongue," which prevailed to such an alarming extent in the north-western section of this State last year, is, I suspect, another form of the Cold Plague. With these remarks by way of prelude, I propose to make a few observations in reference to the general characters of the disease as developed in the cases that have fallen under my charge, and the method of treatment adopted, and then to give a detailed account of a

few of the most important cases which I have had; merely remarking beforehand, that all my patients affected with this disorder, to the number of about twenty, recovered under the prescribed treatment.

The diagnostic symptoms of the Malignant Bilious Pneumonia of this section of country, are rigors, but never a shaking chill; coldness of the body and extremities, pain in the forehead, generally an inch or two above the orbits of one of the eyes, most commonly over the left eye, severe pain in the chest, usually on the right side, pain in the region of the liver and pain in the abdomen. As the malady advances in its inflammatory course, the tongue thickens and expands laterally. In the outset of the disorder the pain is metastatic, sometimes moving from the head to either lung, usually the right one, frequently to the superior lobe of the lung, then to the lower part of the lung adjacent to the diaphragm, then to the liver, and finally to the abdomen in the region of the large intestines; frequently returning over the same track. It is not uncommon for this moving, jumping pain to lessen in intensity in one organ or part of the body, and to increase in a corresponding ratio in another organ at a considerable distance. I have seen the left eye of a patient contracted or shrunken and turned in toward its inner canthus, and vision so impaired that objects appeared double, the pain being much more acute in the region of the lungs and liver than in the head. In two instances I have seen numbness of the extremities; in all there was venous congestion and generally a corresponding increase of action in the arteries. In one of the ten cases hereafter spoken of, there was both venous and arterial congestion, and the pulse never rose to the healthy standard, either in volume or stroke, until the patient, a negro woman, became convalescent; and even after she began to expectorate freely, the oscillation of the artery at the wrist was not perceptible. The Cold Plague assumes many different garbs in which to make its appearance, one of which, as already remarked, is no doubt the Black Tongue; I have known abscesses to form in the early stages, in two instances in the soft parts of the lower jaw; in another case the lips were excoriated and much swollen. I consider that the lungs are primarily affected, the liver secondarily; the liver is engorged, though the engorgement may only produce a suspension of the secretory process, sometimes perhaps causing irritation or inflammation to supervene.

The Malignant Billious Pneumonia in its metastatic state yields to stimulants and diaphoretic ptisans. Brandy and water I consider an excellent remedy in the incipient stages, during the metastasis of the pain, and I gave it in several instances with desirable effect. A tea made of the Eupatorium perfoliatum,

sufficiently strong to act as an emetic or purgative for a short time, then diluted and given as a diaphoretic, is also a valuable remedy in the first stages of the affection. But whenever the disease becomes seated on any organ of the body, the antiphlogistic treatment seems generally to have the best effect; and in no case where expectoration had not taken place, did I dare to give stimulants, opiates, or animal diet in any form. I have found farinaceous diet to be the most suitable, especially before expectoration takes place. Before expectoration has become free, the principal articles of diet I use are rice water, corn gruel, rice, grits, and the crust of corn bread browned by the fire.

I had ten cases of the Cold Plague on a single plantation in Forsyth county, situated on the Chattahoochee river, a rapid mountain stream. The place had been settled about fifteen years, during which time, according to the positive declarations of the occupants, no endemic epidemic, or disease of any kind, had affected those that lived upon it. The appearance of so many cases upon one farm cannot therefore be attributed to any local causes. Most of the persons that visited the plantation during the prevalence of sickness upon it were more or less affected; while none of the neighbors that did not visit the sick were molested by the malady. While in attendance, I was myself twice attacked with it, the first time lightly, the second more severely.

Case 1. Miss E. B. aged 16. This is the case mentioned in which an eye was affected. Symptoms presented themselves in the following order: rigors, general coldness of the body and extremities, sore throat, slight pain in the side, and in the diaphragmatic region of the right lung and liver. The arterial action was considerably increased, with evident venous congestion. A vein was opened in the arm and but little blood taken, which indicated congestion in the superficial veins at least; she began to prostrate, and the artery at the wrist to thread, the bleeding was stopped, and I have not used the lancet in any case since. The tongue thickened and enlarged laterally, as the irritation or inflammation of the lungs and liver increased; it also became coated with a brown fur, and was red at the tip and edges; the skin was dry, the face flushed, with slightly impeded respiration, and considerable nervous excitement, but not so as to affect the mind. The stomach was in an abnormal state, nauseants in the form of tartar emetic water and ipecac. producing no more effect upon it than so much cold water. I gave her a combination of calomel, nitrate potass, and tartar emetic, in the proportion of calomel 2 gr., tartar emetic ¼ gr., nitrate potass 2 gr., every two hours, and put her in a warm saline bath whenever she would bear it; the skin continued dry, and the medicine produced no effect. I now gave her, in connection with the use of the bath, strong tea of

the Eupatoriam perfoliatum; still the medicine and remedies externally had no evident action, save to lessen the pain in the side from the application of a heated dough cake that I had directed to be used in the intervals of bathing. I told the patient that if she did not expectorate soon she would die. At the desire of her father, another physician was called in to consult; we determined to apply blister plasters to the inferior extremities and sinapisms to the superior, and to the diaphragmatic region of the lung and liver of the right side, continuing the use of the bath. No change was produced for the better. A saline enema was ordered, which resulted in a watery evacuation, indicating a suspension of secretion from the liver. The case was again placed under my sole care.

It occurred to me that the application of a sinapism to the epigastric region would rouse the dormant nerves of the stomach, and I was gratified to find after the application that that organ responded to the remedies used. A table spoonful of tartar emetic water, (tar. em. grs. vi., water ʒiv.,) was given every fifteen minutes for a short time; it lessened the febrile excitement a little, but did not produce expectoration. A mixture of oxymel of squills and Coxe's hive syrup was used next, till it produced an emetic effect—the lady ejected from the larynx and bronchial tubes, a handful of vitiated mucous, a great part of which was of the consistence of old cheese, and of a purulent cast. The consulting physician, upon first examination, thought the principal seat of the disease in the liver, but when I directed his attention to the mucous râle in the throat and bronchial tubes, it produced a change in his views. The diet was strictly vegetable and consequently antiphlogistic, except during the brief period of the consultation. The consulting physician wished that chicken water with red pepper should be given, to which I objected, signifying that the inflammation was too high in the lungs, and that there might be gastritis, as the point of the tongue was red, though there was no tenderness on pressure in the epigastric region. I agreed to make trial of plain chicken water, a table spoonful every three or four hours; but it increased the febrile excitement, and was abandoned.

An expectorant of oxymel of squills and hive syrup, with a diaphoretic ptisan of Eupatorium perfoliatum and horehound, with an occasional pill of blue mass, were the chief remedies used during her convalescence.

Case 2. Ann B., a little girl aged 4 years; had two attacks, both ushered in by the same general coldness and rigors, with pain in the frontal portion of the head. She appeared to have recovered from the first, which was a light attack, and to have been in good health for about three weeks, when symptoms of a

return of the disease made their appearance, followed by spasms and signs of apoplexy. The warm saline bath, cold applications to the head, and sinapisms to the extremities, removed the apoplexy, and restored the circulation of the fluids nearly to their healthy action. The tongue thickened and enlarged transversely during the high inflammatory excitement. The mucous tissue of the throat was irritated or inflamed, as has been the case with all the other cases. Thinking that the tendency to apoplexy was produced by worms, I directed a vermifuge to be given, followed by a mercurial purgative; it caused the expulsion of many ascarides. There was considerable pain in the diaphragmatic region of the right lung and liver. The application of the heated dough cake to the side, the use of nauseants, diaphoretics, expectorants, and the occasional use of the blue pill, with diet similar to that in case 1, soon removed the complaint.

Case 3. C. B., a young man 19 years of age, was taken with coldness and rigors, sore throat and pain in the frontal region of the head; tongue pale, with a scarcely perceptible thin coat of white fur, and pain in the diaphragmatic region of the lungs and liver. As the congestion, irritation and inflammation increased in the liver and lungs, the tongue became swollen, the fur became thick, yellowish, and finally brown. Although this was a severe case, I had no difficulty with it, as the stomach and general system responded to the remedies given. As soon as expectoration became free and continued, the disease subsided.

Case 4. Eliza, a negress, aged 25; had the usual precursors, general coldness, and rigors, sore throat, pain in the frontal part of the head, in the diaphragmatic region of the lungs and liver, pain in the renal region of the back, with apparent congestion in the superficial veins and arteries. There was also general prostration and relaxation that seemed to affect the superficial vessels of the body, numbness of the arms and hands; tongue pale, with a very thin coat of white fur. This is the case referred to in which the pulse did not rise to the healthy standard till convalescence was nearly perfected. The system responded to the remedies taken internally, nauseants produced almost immediate secretion from the lungs, and as expectoration increased she improved, and under the application of sinapisms to the extremities, the heated dough cake to the side, a stimulating liniment to the back, and a tepid saline bath to the feet, with a continued use of nauseants, diaphoretics, ptisans, a mercurial whenever the bilious secretion appeared to be impeded, and expectorants, she recovered. A sinapism applied to the spinal column commencing at the inferior part of the neck and ending at the middle of the back, soon removed the numbness from the arms and hands.

Case 5. Columbus, a negro boy, four years old; indicating

symptoms, sore throat, general coldness and rigors, pain in front part of the head, in the diaphragmatic region of the lungs and liver, in the abdominal region, apparently in the large intestines. The tongue was covered with a thick coat of white fur, and as the disease advanced, this organ enlarged and reddened at the sides and point, the fur assuming a brownish cast. The arterial action was much increased, with evident superficial venous congestion. The warm saline bath was used, cold applications to the head. An aqueous solution of sulphate magnesia and tartar emetic (℥i. of salts, ℥iv. of water, 1 gr. tartar emetic) was administered in doses of one teaspoonful every fifteen miuutes, until it acted on the bowels three times. The lips commenced healing under this treatment, and with the use of the Eupatorium perfoliatum as a diaphoretic, and the oxymel of squills with hive syrup as an expectorant, and an occasional blue pill to stimulate the liver to proper action, the patient recovered. The diet was the same as in the other cases.

The cause, whatever it be, of malignant bilious pneumonia, I conceive to be inhaled into the mouth and nostrils, and by producing its action on the Schneiderian tissue of the nose, and the mucous membrane of the mouth and fauces, it creates the cold plague. That the mucous tissue, pleura and parenchyma of the lungs are involved in this disease, I think no one will deny.

On the Cure of Vesico-Vaginal Fistula. By Joseph Pancoast, M. D., Professor of Anatomy in Jefferson Medical College.

To Professor Huston.

Dear Sir,—At your request I send you a brief notice of a new mode of operation for the cure of urethro and vesico-vaginal fistula, which I have successfully employed in two cases, a more detailed account of which I propose hereafter to present you with. The two operations above alluded to, were respectively on patients of Professor Meigs, and Dr. Condie. In one case, there was a complete destruction of a cross section of the whole urethral structure, at its juncture with the neck of the bladder; in the other there was an elongated orifice in the *bas fond* of the bladder, which would more than admit the end of the finger.

"The peculiarity of the operation, consists virtually in attaching the two sides of the anormal opening firmly together, on the principle of the tongue and groove, so as to get four raw surfaces in contact, and thus increase the probabilities of union by first intention. For this purpose it is necessary that the margins

of the fistula should have considerable thickness; and when not found in this state, they are to be thickened by repeated applications of lunar caustic, or, better still, of the actual cautery.

"Having exposed the fistulous orifice as thoroughly as possible with a Charriére's speculum from which the sliding blade has been removed, an assistant at the same time drawing the vestibulum well up towards the front of the pubis, my first object in the operation is to split the most posterior margin of the fistula to the depth of half an inch, with a sharp-pointed sabre-shaped bistoury. I next pare off the edges of the other lip of the fistula, so as to bring it into a wedge-shape; first reverting it as much as possible with a small blunt hook, and trimming off the mucous membrane on the side next the bladder with the curved scissors or scalpel, and then detaching in like manner, the vaginal mucous membrane, to the breadth of three-quarters of an inch, along the whole extent of the lip. This is a very difficult but most important part of the process; and great care should be taken to obtain a sufficient extent of raw surface, at the two angles of the fissure, where the lips will rest merely in apposition. Having checked the bleeding by the use of astringent applications, my next object is to insert the raw wedge or tongue into which one of the lips of the fistula has been converted, into the groove which has been cut in the other, and hold them in close connection. This I accomplish, by the means of a peculiar suture that might be called the plastic, and in the same way that I have described its application in reference to some plastic operations, in my Operative Surgery, and in the American Journal of the Medical Sciences, for October, 1842. The suture threads are to be passed with short, sharp, curved needles, held in Physick's artery forceps with the handles made of twice the ordinary length.

"When the sutures are knotted firmly, the tongue or wedge will be found immovably imbedded in the groove. The sutures I leave for two weeks or more, or until they become loose. A gum catheter should be kept in the bladder to prevent the accumulation of urine. To keep the inflammation from running to a destructive height, a bladder of cold water should be applied for thirty-six hours to the vulva.

"On the second day I direct the frequent injection of a solution of Zinci. Sulph. into the vagina, in order to increase the tone of the parts. On the third or fourth day I apply to the line of union a solution of lunar caustic with a camel's hair pencil. This application should be made twice in the twenty-four hours, the solution being gradually increased in its strength. Union by first intention may be expected to take place under this treat-

ment to a considerable extent; at such points as it should fail to occur, union by second intention is to be promoted by the use of lunar caustic in substance, so as to raise a bed of granulation on the raw surfaces of the lips, while they are held in contact by the plastic suture. Occasionally, where the fissure is large, it will become necessary to repeat the process after a partial success has been obtained by the first operation.

Philadelphia, April 8, 1847.

Case of traumatic Tetanus, successfully treated. By O. H. Costill, M. D. of Frankfort, Pennsylvania.

Feb. 18th, 1847. I was called about 10, A. M. to Margaret ——, a coloured woman, said to be in a fit. I found her lying on a settee, her arms, legs, and whole frame perfectly rigid. Her eyelids were drawn down so tightly as scarcely to be lifted, and her jaws were firmly set. Upon inquiry I found that two days previous she had received a carpet tack in the bottom of her right foot. It was withdrawn, and nothing more was thought of it till the evening previous, when she complained of pain in the foot and stiffness in the leg and back. She had, however, risen in the morning and resumed her usual occupation, until seized as above described. As the surface of her body was cold, I had her placed in bed and her clothes loosened, (though owing to the rigidity of her limbs they could not be removed,) and warm applications to the feet. After some time the spasm subsided. She opened her eyes, could move her limbs and converse. She complained of extreme tenderness in the anterior part of the sole of the foot; could scarcely bear it touched, though I could find no point where the nail had entered. The pain extended up the leg and back to the neck and jaws, and there was stiffness about the root of the tongue. I directed a lye poultice to the foot and a mixture of castor oil and turpentine to be given every hour and a half, until the bowels should be freely moved, intending after that to commence with opiates should the tetanic symptoms continue.

I saw her again at 12 o'clock. She was much more comfortable but had had one very severe spasm. Medicine had not operated. During the afternoon she became much worse. An urgent message was sent for me, and as I was absent from home my friend Dr. Taylor, at the request of my family, was on his way to visit her for me when I returned. He was so kind as to accompany me, and at my request attended the case with me subsequently.

It was about six in the evening when we saw her. She had had more than a dozen spasms during the afternoon, and one occurred while we were with her. Her breathing was difficult, as

if choking, the jaws were set, foam proceeded from the mouth. The body was bent in a bow-shape resting upon the occiput and heels (opisthotonos.) Upon examining the foot after the spasm subsided, we could find no point where the nail had entered, but excessive tenderness on the anterior part of the sole within a space of the size of a dollar. Within this space I made two incisions crossing each other at right angles, into which lint saturated with spirits of turpentine was inserted, and the lye poultice re-applied. We directed her to take a pill containing two grains of opium and two of calomel every hour. We saw her again at half past 9 o'clock. She had taken two pills; had had no spasms—ordered one pill every two hours through the night, unless asleep. 19th, 9 A. M. Had taken four pills; had no spasms until six A. M., then had two, but not so severe; we applied at this time a solution of caustic potash along the spine. She was sick at the stomach this morning, and vomited light green fluid. To continue the pills, and as the bowels had not been moved since the attack, we directed a laxative enema. Evening. No spasms through the day; still sick, and vomiting occasionally; some pain in the limb extending up the back; neck and jaws better. The bowels have been freely moved three times. Mouth sore from the calomel. To discontinue the pills, and take two grains of opium at 10 o'clock, with nourishment through the night. 20th, 9 A. M. Slept some during the night, but was much distressed by sickness—vomiting the same light green fluid. Much more prostrate. The pulse, which had been nearly natural, till this morning, was frequent and feeble. To take a mixture containing 5 grains carb. ammonia and twenty drops tinct. opii every two hours; blister to the epigastrium. Evening. Much better; pulse full and soft. Sickness nearly gone. The blister had drawn but slightly. 21st, 9 A. M. Has slept well. No sickness—says she feels very well. To take the ammonia, &c., occasionally—from this time she continued to recover, and is now at service. The wound from the incision made in the foot continued sore for several days; but we could not say it suppurated.

I offer this case for publication, not because there was anything new in the means used for its cure; there certainly was not, but rather as additional evidence that this dreadful malady, so often fatal, will sometimes yield to the ordinary method of treatment. A case occurred to me many years since, in which the tetanic symptoms were very decided, though not so strong as in the case just related, which recovered by the liberal use of opium and stimuli and the dilatation of the wound.

March 24th, 1847.

Congenital obstruction of the Colon in an infant. By JAMES BRYAN, M. D.

April 2d, 1847.—On the 31st ult., I was requested by my friend Dr. L. P. Gebhard to make a post obit examination of J. B., a male infant three days old, who had died without having had any discharge from its bowels after birth. The child had been cheerful and took the breast at first, but gradually became languid, and sunk without evident cause, except the want of a discharge per anum.

On inspection of the body, the abdomen was found very much enlarged and of a greenish colour. The capillaries of the skin were injected, and the cuticle of a purple colour, as low as half way down the thighs, involving the genital organs, groins, &c.; the abdomen was tympanitic; the os frontis was freely separated down to the root of the nose; the general appearance of the infant in other respects was that of health.

On making an incision through the integuments in the direction of the linea alba, a large quantity of fœtid gas escaped from the abdominal cavity. The bladder appeared healthy and contained a little urine; the uracus was attached to the umbilicus and bladder; the peritoneum in every direction was engorged with dark coloured blood, and the circulatory arcades of the mesocolon with the small vessels of the colon were filled with blood, and easily seen when the intestine was held between the eye and the light. The greater part of the hypogastric region was filled by a tumour about four inches in diameter. On opening the colon above this tumour (which proved to be situated in the sigmoid flexure of the colon,) large quantities of meconium and fœcal matter were discharged. The peritoneum when divided was found to cover a smooth surface of the tumour; this surface proved to be the outer coat of the intestine, which was very much distended and contained the tumour in the form of coagulated blood, as black as pitch. The descending colon was distinctly traced into the covering of the tumour, and was found to adhere to the margin of the pelvis, and to be entirely *imperforate* in the direction of the rectum.

The anus was in a natural condition; a probe would pass without difficulty, and had been passed during life up the rectum to the tumour or obstruction. A few drops of blood had followed the introduction of the probe. The genital organs were well developed; so also the liver, stomach, and small intestines. The tissue of the intestines around the tumour was found *apoplexied.*

The explanation of this case would appear to be, that a rupture of some of the vessels of the sigmoid flexure of the colon

took place during uterine life. A gradual discharge of blood into the intestine and between its coats took place, producing pressure on the surrounding parts, and in this way, inducing adhesions to an extent to close the passage of the blood towards the rectum, and causing the general adhesions which were found outside of the intestine.

The *treatment* of this case, *provided the diagnosis had been made out*, would be, to make an opening into the tumour through the rectum; this failing on account of the adhesions, we might perhaps resort to the production of an artificial anus in one of the situations usually recommended; in this case the latter operation would probably have relieved the patient, at least temporarily.

To the Editor of the Medical Examiner.

Sir,—Permit me, through the pages of your journal, to direct the attention of the younger members of the profession to a practice, which prevails more or less with many of them, of asking for farther advice in difficult cases of their seniors, by letter, and thus subjecting them to manifest inconvenience and responsibility, without accompanying their request with the wonted, or any, *honorarium*. Where special relations exist, or have existed, as between preceptor and pupil, there may be apparent, if not real, propriety in the latter seeking occasionally for farther enlightenment; but wherever the patient can afford to remunerate the consulting physician, it ought most assuredly to be the pleasure—if not the duty—of the attending physician to suggest the appropriate accompaniment. The undersigned has been subjected to repeated inconvenience on this head, and he knows that others have been equally annoyed.

Philadelphia, April 17, 1847. IATROS.

[We publish the foregoing communication with pleasure, in the hope that it may be useful in correcting an evil of which we hear many and just complaints. We often receive communications complaining, indeed, of eminent physicians for not having answered letters asking counsel, and invariably we have found that the letters sent contained no fee, and sometimes were not even postage paid.—EDITOR.]

BIBLIOGRAPHICAL NOTICES.

Six Lectures on the Uses of the Lungs; and causes, prevention and cure of Pulmonary Consumption, Asthma, and Diseases of the Heart; on the laws of longevity, and on the mode of preserving male and female health to an hundred years. With twenty-eight illustrations. By SAMUEL SHELDON FITCH, A. M., M. D. 12mo., pp. 324. New York, 1847.

We take up the notice of this production with feelings of contempt, not unmixed, however, with sorrow. Nearly twenty years have elapsed since its author published "A system of Dental Surgery." He was then a reputable dentist; holding a position amongst the best of the "craft;" and his "system" was esteemed so creditable to him in all respects, that it obtained encomiums from those whose good opinion it must have been his pride to possess. And now—*quantum mutatus!* The *auri sacra fames* has, we fear, induced him to quit the path of credit; to abuse the profession of which he is an enrolled member; and in the production before us to exhibit an amount of ignorance, both on general and medical topics, which must excite the wonder of every one how he could have been entitled to the suffixes of A. M. and M. D., which he attaches to his name.

We are apt to despise the miserable mercenary, who, without any claim to medical attainments, endeavours to gain a wretched subsistence on the gullibility of his brethren; but what ought to be our feelings, when a licensed member of the profession quits its honest paths, and wanders into the devious wilds of empiricism. Nor is the author of these lectures the only one to whom these remarks apply. We have reason, indeed, to believe, that the *fancied* success of others, a few years ago, led him to turn his attention to this subject; and that bromine was to be one of the hacks on which he designed to ride into notoriety and pelf. The example of Ramadge—the great archetype for the smaller fry that have succeeded him—himself belonging to the Royal College of Physicians of London; and yet a greater empi-

ric perhaps hardly exists, as we had occasion to hint when noticing the translation of Läennec, with which his name has been connected—has led to a host of inhalers and consumption curers, who not only blazon amongst the public their own false or fancied [?] statements of success, but obtain from men in the ranks of the profession—as we shall mention more particularly hereafter—testimonials for the furnishing of which—if they have a spark of interest remaining in their noble calling—they must, by this time, be heartily ashamed.

The "Lectures" before us are evidently addressed to the people, not to the profession, whose members, indeed, they grossly slander and abuse. This fact, as well as the meretricious title, would have prevented us from taking the slightest notice of them, were it not that the "A. M., M. D." might mislead some of our readers, and induce them, in their want of information, to send for the work. We cannot refer to all the examples of gross ignorance and misrepresentation that pervade it; but it may be well to cite a few, with the view of showing, that these charges against the author and his production are not only sustained, but that our expressions have been even too guarded. "In 1827," he remarks, "whilst pursuing some investigations in Philadelphia upon nervous influence, preparatory to my graduation thesis, I discovered what I conceive to be the grand uses of the lungs, and their first great purpose. In these researches I was led to ask, what it was that gave support and power to the nervous system. I traced this support to the lungs; and at once and forever, to my mind, all darkness upon the uses of the lungs disappeared." p. 28. And what does the reader suppose was the essence of this immortal "discovery"?—that the lungs "give to the human machine its power of action. This power exists in the atmospheric air; and the lungs are the medium by which, and through which, that principle which gives the human machine its living power is conveyed to it." This immediately accounted to him for the fact that women are weaker than men. "The lungs of women are one-third smaller than those of men;"—and why one man is stronger than another. "Were you required to select the strongest man of your acquaintance, would you select a man with a flat, thin chest, long neck, and narrow, round, stooping

shoulders, or would you select a man with a wide, deep, round chest, and broad, heavy shoulders? There can be but one answer. You would choose the man with large lungs, and you would not be disappointed. You would find his strength in the exact ratio of his pulmonary developement, other things being equal." It explained to him also, satisfactorily, why we use the right arm rather than the left. "It is seen with all the natives of this globe, that the right arm is preferred in its use [?] over the left; in other words, that all men are right-handed, as a general rule. Some very unsatisfactory reasons are given for this. The true reason is found in the fact that the lungs give us the power of action, and that the right lung is larger than the left; hence it gives more power to the right arm. I have often seen the right arm hang quite useless at the side by extensive disease of the right lung. [!] Very rarely we find persons left-handed. I believe in all cases where they are left-handed, the left lung will be found the largest. I have often had an opportunity of verifying this fact; so that being left handed is not a matter of capricious or accidental choice in the infant, but is owing to the left arm being the strongest, because the left lung is the largest." p. 31.

But there is no end to the removal of difficulties effected by this "discovery." It explains, for example, why a brother in active life in the country possesses "in a vast many cases double the physical strength of the brother in the city,"—the lungs of the rustic brother being, we presume, larger:—why the eagle "that poises himself high in the heavens, and, almost with the rapidity of lightning sweeps to the earth, and seizing a living animal of nearly or quite his own weight, flies away with him to the top of Mont Blanc;"—why "many [qr. how many?] migratory pigeons that travel fifty miles an hour, that you can hold upon your hand, [qu. the pigeons, ?] consume more air than some females:"—but we pause for breath; our lungs are not sufficiently capacious for the "power," the muscular exertion needed to record all the ramifications of this great "discovery."

Next follow some remarks—not very connected, it is true—on those wanderings from the true path by men of science, which show that in too many cases "they have started wrong; that their premises are erroneous." As, for example, the "hieroglyphics of Egypt;"—by which the author, be it observed—does not mean

to convey, that the hieroglyphics "have started wrong, or that their [the hieroglyphics'] premises are erroneous;" but that by a discovery analogous to his own, "we now learn that what *was* supposed to be a cloud, covering most inscrutable mysteries, *are* only simple records of men's actions, wishes, lives and deaths, and *were* once familiarly read by all the stone-masons of Egypt." Then comes the application of this to the lung-discovery. "A perfect cloud" rests over the lungs, their uses and diseases. "Their grand purpose is entirely overlooked, and unknown by the mass of medical and other men:"—and now follow sentiments, which, if the "discovery" had not been made, ought still to have been sufficient to immortalize the author! "I do not know that I ever met two physicians who were of any eminence and not mere imitators, who thought or acted alike in managing consumption, or who had the least notion how it might be prevented. Nor have they any confidence in their own practice: in few cases have they the least hope of curing the disease or preventing it." * * * "Intimate to the medical body, that consumption is a curable disease, and at once such an idea is denounced as the height of folly or knavery. What results from this darkness of the Faculty? [of which, be it observed, he still professes, but we hope is not considered, to be one.] Why the whole land is covered with a pall; nearly one-half of the adults, when they die, die of consumption or diseases of the chest. The whole population are running everywhere for aid. All confidence in the regular medical faculty for consumption, is lost; nobody respects them, and they do not respect themselves on this subject;"—and then comes the climax, the apotheosis! "Allow me here to say, from a vast experience [!!] that nine-tenths of all that is laid down in medical books, taught in medical schools, or pursued in medical practice, for the prevention and cure of consumption, is calculated to make the disease, not to cure it." And again, after referring to the published opinions of Dr. Chapman, who, he says, "solemnly declares that in a practice of fifty years he has never seen a case of seated consumption cured;"—but who, we beg leave to inform the author, with all due deference to Dr. Chapman, is very far from being the exponent of the views on this subject of the most enlightened pathologists—he exclaims, in tone, and *English*, in entire keeping with the rest of his observations: "This, gentle-

men and ladies, is a record of his 'practice,' and of nearly all, with scarcely an exception, in the regular faculty up to this time; and most fully confirms all I have said upon the awful destructiveness of their practice. This leads me also to call to your minds, that nearly all the higher classes in this country, who only employ the old school physicians, when struck with consumption, die of it. Whilst with the more independent and thinking classes, not trammelled by fashion; not reverencing mere names and pretensions, but fly from such persons, and ask for facts, demand cures, find often, at last, in perhaps an obscure old woman, or some illiterate person, that aid which could not be obtained from their regular, and 'world and time-honoured physicians.' This want of the success of the school-bred physicians is owing to their profound ignorance of the uses of the lungs. Why do they not at once, as honest men, tell their consumptive patients, we cannot cure you, and leave them to nature and its resources, without adding to their sufferings the accumulated and accumulating ills of drugs and medical remedies, that, in nine cases out of ten, hurry them to their graves, and deprive them of all comfort whilst living." p. 36.

Yet it must be gratifying to the profession to learn, that the author says all this for the sake of truth, and that he is full of loving kindness for them. "My father, my grandfather and brother," [how are the mighty fallen!] "were regular, eminent, and respectably educated physicians. No one respects them [the profession] more, but I do deplore their ignorance of the uses of the lungs, and causes of consumption; and most of all, their ignorance of even rational practice in pulmonary diseases." p. 36.

But we need proceed no farther. Are we not then justified in the terms of reprehension in which we have spoken of these "Lectures;" and can we be surprised at the declaration of the author, that besides his opportunities in London, he has had *five thousand consultations* in cases of consumption and kindred diseases within the last three years,"—that is *fourteen new cases* daily, and every day during that time!—and that in no instance has he ever had a decision of his proved incorrect by any physician? Nor will any one be astonished, that advertisements, of the most nauseous character, have been left at the doors of respectable dwellings in this city, filled

with, perhaps, in many cases *bought* testimonials in favour of the "lectures." We say, "perhaps in many cases bought;" for the editors of a respectable and independent journal in a neighboring city have affirmed, that they were offered a sum of money for a favourable notice,—that they spurned the offer,—and noticed the paltry production in terms that it richly merited.

One word more. Certain physicians have furnished testimonials to the author of these "Lectures," and as they have courted—what we, however, consider unenviable—notoriety, it is proper that they should enjoy it. Dr. Luther Brigham, of Lowell, introduces him as "justly celebrated for his researches in the uses of the Lungs, and the nature and treatment of Pulmonary Consumption. I think his opinion and advice on these subjects of great value. His patients in this place speak of him in the highest terms." Dr. Benjamin West, of Nantucket, speaks of him as "one who is acquainted, to a *surprising* extent, with the subject (consumption) in its most important bearings; and who by his disinterested actions has shown himself entitled to the respect and confidence of all with whom he may be brought in contact." Next we have a letter from Dr. Hubbard Graves, of Nashville, N. H., introducing him to a professional brother as his "friend" Dr. Fitch, who had recently delivered some lectures on consumption, its causes and cure, in that place. "On my announcing his subject," he says, "the idea of quackery may possibly strik eyou, but there you will be most agreeably disappointed. Dr. Fitch regularly studied his profession, both in this country and in Europe; and you will find him a man of strictly philosophical mind, who has thoroughly examined the theory which he advances. His ideas are not crude and confused as those of quack-lecturers invariably are; you will find that they are clearly arranged, and that all his conclusions have been logically deduced. In fact, from what I have seen of Dr. Fitch, I am satisfied you will deem his acquaintance in the highest degree agreeable."

Messrs. Brigham, West, and Graves, have acted as gentlemen ushers and prolegomena to their "friend," and they will doubtless pride themselves—for "*nulla vestigia retrorsum*"—in having manfully aided to diffuse the new light—the "discovery;"

and to obtain some of the effulgence reflected from the luminary to which they have consented to act as satellites; and in the language of Pope, it may be asked

"Why Jove's satellites are less than Jove?"

They cannot therefore complain, that they are all placed by us in the same category, or that the maxim *noscitur a sociis* should apply to each of them.

Lectures on the Comparative Anatomy and Physiology of the Vertebrate Animals, delivered at the Royal College of Surgeons of England, in 1844 *and* 1846. By Richard Owen, F. R. S., Hunterian Professor, and Conservator of the Museum of the College. *Part* I. *Fishes. Illustrated by numerous Wood cuts.* 8vo. pp. 308. London, 1847.

We turn with pleasure from the ungracious task of impaling ignorance and unblushing empiricism, to notice the labours of one who has attained a well earned and well merited preeminence in certain departments of medical science more especially. Perhaps at this day, indeed, no name stands higher in the roll of living comparative anatomists than that of Richard Owen,—a successor of the amiable and excellent Cliff, who filled so ably the office of Conservator of the Museum of the Royal College of Surgeons, of London,—from its first establishment, if we mistake not.

The volume before us is the second of the series,—the first having investigated the comparative anatomy and physiology of invertebrate animals; and a third is to follow, devoted to the consideration of the mammalia in the same relations.

We cannot do more than say, that after an "introductory lecture" on the characters of the classes of vertebrate animals, the work examines, in succession, the osteology, myology, neurology, digestive system, vascular system, pneumatic and renal organs, and generative system of fishes, in a manner so able and perspicuous as to make us the more anxious to possess the third and remaining volume. When completed, it will form a *thesaurus* on the subjects embraced by it, which every scientific inquirer into the animal economy ought to hasten to possess.

New Elements of Operative Surgery. By ALF. A. L M. VELPEAU, Professor of Surgical Clinique of the Faculty of Medicine of Paris, etc. etc. etc. *Carefully revised, entirely remodelled, and augmented with a treatise on Minor Surgery. Illustrated by over* 200 *engravings, incorporated with the text; accompanied with an atlas in Quarto of twenty-two plates, representing the principal operative processes, surgical instruments, &c. First American, from the last Paris edition.* Translated by P. S. TOWNSEND, M. D., Late Physician to the Seaman's Retreat, Staten Island, New York. *Augmented by the addition of several hundred pages of entirely new matter, comprising all the latest improvements and discoveries in Surgery, in America and Europe, up to the present time. Under the supervision of, and with notes and observations by,* VALENTINE MOTT, M. D. Professor of Surgery with Surgical and Pathological Anatomy in the University of New York; etc. etc. etc. In three volumes. New York: Samuel S. and William Wood, 1847.

The appearance of the *first* and *second* volumes of this important work was duly chronicled as they successively came from the press; and now we have to announce the *third* volume, with the accompanying atlas, which completes the publication. We congratulate Dr. Townsend on the conclusion of his arduous task, for such it unquestionably has been. To translate, collate, and prepare for the press three such huge volumes is no trifling matter; and to have carried the work through without interruption or delay is in the highest degree creditable to his zeal and industry. It must be confessed, however, that the haste with which this has been accomplished has not been without some disadvantages. All who have occasion to examine the volumes will find reasons enough to regret that a little more time was not given to arrangement of the subjects of which they treat, as well as condensation of the language in which the various topics are discussed. Of course we allude to the *American* portion. The volumes might in this way have been materially lessened, much useless detail avoided, and greater perspicuity of expression attained. The faults in style, although not an *essential* matter, are such, in many instances, as ought

certainly to have been avoided by so practised a writer as the Editor. What apology, for instance, can be offered for such Gallicisms as "M. S. Cooper" (Mr. Samuel Cooper), "M. Dudley," "M. Kirby," "M. Bostock," "M. Fahnestock," &c. If it be allowable at all to render the names of Frenchmen thus, there surely can be no reason, in an English version, for translating English names into French. The habit of the Editor, of using the pronoun in the first person plural, as is the custom of journalists, instead of the first or third person singular, when uttering his own sentiments, is hardly consistent with good usage. But in the notes by Dr. Mott, the singular and plural form of the pronoun are used indiscriminately. Such sentences as the following, for instance, are common: "The means which I have resorted to, may possibly have been used by others before my time, but I am not aware of the fact. We are sure that many of the cases we have met with, had been abandoned," etc. Such jumbling of words is not only inelegant, but tends to confuse the reader, and the editor's privilege should have been exercised for their correction. But, notwithstanding these and many even greater imperfections, the publication is one of very great worth, and the profession is under lasting obligations to Dr. Townsend for the service he has rendered to Surgical Science in putting this work of Velpeau in an English dress; and to Dr. Mott for the many valuable contributions from his own extensive experience with which this edition is enriched.

A Practical Treatise on the Diseases of Children. By D. Francis Condie, M. D., Secretary of the College of Physicians; Member of the American Philosophical Society; Honorary Member of the Philadelphia Medical Society, etc. Second Edition, revised and improved. 8vo. pp. 657. Lea & Blanchard. Philadelphia, 1847.

On the appearance of the first edition of this work, we pronounced it to be the best treatise on the diseases of children in the English language; and notwithstanding all that has been published since, we still regard it in that light.

"In the preparation of a new edition of the present treatise," says the author in his preface, "every part of the work has been subjected to a careful revision; several portions have been entirely re-written; while, throughout, numerous additions have been made, comprising all the more important facts, in reference to the nature, diagnosis, and treatment of the diseases of infancy and childhood, that have been developed since the appearance of the first edition."

The first *part* treats at length and with great clearness of the "management of children," of their "peculiarities of organization," the "pathology of infancy and childhood," semeiology," etc., and is alone worth the price of the book. The subjects which appear more particularly to have undergone revision, as far as a hasty examination has allowed us to discover, are, pleurisy, pneumonia, croup, and tubercular meningitis; and of the eruptive diseases, measles and scarlatina. On these, as well as the various other subjects embraced in the work, the author has evidently read much and observed well, and his remarks may be fairly admitted as containing the most approved doctrines of the day. His pathological views we regard as particularly sound; and, generally speaking, we find little to object to in his therapeutics, although we cannot always agree with him in the means he employs to give them effect. His attention to German medical literature is discoverable in his fondness for what may be called German prescriptions, or German remedies; thus the chlorohydrate of ammonia in visceral inflammations and cutaneous diseases; and hyoscyamus, variously combined, with ipecacuanha, mild chloride of mercury, prepared chalk, etc., for a wonderful variety of affections. To the formulæ throughout the book we have found more occasions for exception than any thing else. Occasionally, too, we have examples of medicines miscalled, such as "*hydrochloride of ammonia*," etc. In a work from a less competent author, or one of less general excellence, we should not think of naming such imperfections, but in the present instance we feel jealous that any of the kind should exist. There is one point, however, in which our experience differs so greatly from that of the author, that we cannot refrain from noticing it—it is in the quantity of the watery extract of opium which may be safely given to children. At page 335,

treating of hooping cough, we have in a note the following prescription and direction for its administration.

℞. Opii Pulv. ʒj.
Aq. Bullient. ℥iij.

Let it stand for three hours, then strain, and add ʒj. bi-carbonate of soda. Dose, for a child two years old, a teaspoonful every three hours.

If given according to the direction above, a child two years old would take the watery solution of *twenty grains of opium* in twenty-four hours.

What effect hooping cough may have in modifying the susceptibility of the constitution to the action of the remedy, or how far the alkali may modify its narcotic properties, we are not prepared to say; but notwithstanding our very great confidence in the experience of the author, the dose is certainly much greater than we could venture to administer to so young a subject.

We cannot close this notice without again expressing our high estimate of the work. The present edition of it, as the author has promised, has been carefully revised, and presents "a full and connected view of the actual state of the pathology and therapeutics of those affections which most usually occur between birth and puberty."

CHARGE *to the Graduates of Jefferson Medical College of Philadelphia.* Delivered March 25th, 1847, by Professor DUNGLISON. With a list of the Graduates. Published by the Graduating Class.

We cannot better express our own opinion of this excellent address, than by quoting the language of the able and courteous editor of the New York Annalist. "Dr. Dunglison's address is, as might be expected from so ripe and rare a scholar, highly appropriate. 'Good,' [and Godman] 'in our own, and Park, in a sister profession are referred to as showing what can be done in the way of acquiring solid accomplishments, by enduring perseverance at the commencement of a professional career. Study, courtesy, caution, honor, &c., are all, as becomes a gentleman and a conscientious teacher, forcibly recommended to the medical *debutante*, and an eloquent and feeling peroration dismisses to the active duties of their calling, 'the largest class of graduates that

has ever graced the halls of Jefferson Medical College, or of any similar institution in the country.'"

The following extract from the address, indicates the sources from whence the large classes of the College are drawn. Few of those who are not immediately connected with the medical institutions of Philadelphia, have an idea of the great distances from whence medical students are attracted to this city.

"You are here from regions widely distant from each other—not from 'Greenland's icy mountains,' but from 'India's coral strand'—for one of you is from remote Burmah. Representatives, too, are amongst you from Ireland, Canada, and New Brunswick, and from most of the States of this Union.

Of those on whom the degree of Doctor of Medicine has been this day conferred, seventy-two have spent one scholastic year in other incorporated institutions:—one in the Medical Department of Bowdoin College, Maine; two in that of Dartmouth College, New Hampshire; two in the Berkshire Medical Institution, Massachusetts; three in the Medical School of Castleton, Vermont; one in Geneva Medical College, New York; three in the University of New York; and two in the College of Physicians and Surgeons of that city; seven in the Medical Department of the University of Pennsylvania; and one in Pennsylvania Medical College; one in the Medical Department of the University of Maryland; and one in that of Washington University of the same state; six in that of Hampden Sidney College, at Richmond, Virginia; and fifteen in that of the University of Virginia; six in the Medical College of South Carolina; three in the Medical College of Georgia; eight in the Medical Department of the University of Louisville; and three in that of Transylvania University, Kentucky; four in the Medical College of Ohio; one in Willoughby Medical College; one in the Medical Department of the Western Reserve College, at Cleveland, Ohio; and one in the Medical College of Louisiana.

The afflux hither from other institutions must continue. It has been annually on the increase; and at no time, perhaps, has the ratio been as great as during the past session. The multiplication of medical schools, instead of diminishing the number of those that seek instruction in this city, augments it; for the facility of intercourse between the most distant places is so great, that a journey to Philadelphia is now within the means of a large proportion of medical students: hence it is, that so many visit her at least one winter, in order that they may enjoy those ample opportunities for full medical instruction, which have obtained for her the character of being the great centre of medical education on this side of the Atlantic."

THE MEDICAL EXAMINER.

PHILADELPHIA, MAY, 1847.

INHALATION OF SULPHURIC ETHER.

Our Exchange journals continue to be crowded with cases and discussions illustrative of the effects of this kind of medication. Not merely is it employed when cutting instruments are used, but in the treatment of luxations, hernia, and labour, especially in instrumental cases; in asthma, croup, and nearly all the ills that flesh is heir to. These numerous experiments will doubtless lead to a better understanding of its powers and adaptations, and it will be strange if much good does not result. Bad consequences are known to have followed the employment of the remedy in repeated instances, but the only wonder is, with such indiscriminate use of so powerful an agent, that the number of accidents has not been greater. That our readers may know something of what is said and doing on the subject, at home and abroad, we have, at the sacrifice of variety, devoted a considerable portion of the present number to extracts bearing on the most important points involved in the discussion. Already, in this country, we think we discover a decline of the excitement in relation to it, which prevailed so extensively at the first.

DELEGATES TO THE NATIONAL MEDICAL CONVENTION.

For the following list of Delegates to the National Medical Convention, we are indebted chiefly to the American Journal of the Medical Sciences. We have made some additions to the list published in that journal, but still the roll is not complete; and of those named it is not likely that all will attend, while the places of some will probably be supplied by others. It is understood that representatives have been appointed in the States of Connecticut and Louisiana, but we are not advised of their names or how many have been designated.

Vermont.—Drs. Chas. Hall, C. W. Horton, A. G. Dana, and Dyer Story.

Massachusetts.—From the *Massachusetts Medical Society*, Drs. S. W. Williams, of Deerfield, E. Hale, of Boston, E. Huntingdon, of

Lowell, A. L. Pierson, of Salem, R. Fowler, of Stockbridge, J. V. C. Smith, of Boston, L. Bartlett, of New Bedford, E. W. Carpenter, of Sandwich, W. Bridgeman, of Springfield, O. W. Holmes, of Boston, and Geo. C. Shattuck, jr., of Boston.

From *Middlesex District Medical Society*, Drs. Elisha Huntingdon, John W. Graves, Nehemiah Cutter, and Josiah Curtis.

Rhode Island.—From the *Rhode Island Medical Society*, Drs. Theophilus C. Dunn, Usher Parsons, Richmond Brownell, and George Carpenter.

New York.—From *New York State Medical Society*, Drs. John Stearns, J. W. Francis, J. C. Cheeseman, J. R. Manley, E. G. Ludlow, J. A. Wing, Danl. Ayers, T. W. Blachford, Darius Clark, Morgan Snyder, Jas. S. Sprague, J. M'Call, A. Willard, N. S. Davis, P. H. Hard, Maltby Strong, Alex. Thompson, L. T. Tefft, G. W. Bradford, Enos Barnes.

From *New York Academy of Medicine*, Drs. J. Stearns, F. C. Stewart, J. R. Wood, D. H. Bulkley, V. Mott, E. Delafield, J. C. Bliss, R. S. Kissam, D. M. Reese, E. L. Beadle, J. Linsley, O. S. Bartles, C. S. Smith, M. Hoit, W. H. Van Buren, J. O. Pond.

From the *New York Medical and Surgical Society*, Drs. J. A. Swett, J. G. Adams, A. Dubois, A. C. Post, W. P. Buel.

From the *New York Hospital*, Drs. John Watson, and John H. Griscom.

From *Albany Medical College*, Profs. Marsh, J. M'Naughton, T. R. Beck, and Hun.

From Faculty of *Geneva Medical College*, Profs. C. A. Lee, C. B. Coventry, and J. Webster.

From *Faculty of Medicine of Buffalo University*, Prof. F. H. Hamilton, Austin Flint, J. P. White, and Geo. Hadley.

New Jersey.—From *Medical Society of New Jersey*, Drs. Smith, and Pierson, of Essex, C. Marsh, of Passaic, Stewart, of Morris, Forman, of Mercer, Parrish, of Burlington, Taylor and Cooper, of Camden, Garrison, of Gloucester, and Howell.

From *District Medical Society of Burlington*, Drs. Cole, Stratton, and Read.

Pennsylvania.—From *College of Physicians of Philadelphia*, Drs. T. T. Hewson, I. Hays, S. Jackson, J. W. Moore, A. Stillé, J. R. Paul, W. Pepper, G. Fox, C. Morris, D. F. Condie, J. Randolph, R. C. Bridges, C. D. Meigs.

From *University of Pennsylvania*, Profs. N. Chapman, S. Jackson, Geo. B. Wood.

From *Jefferson Medical College*, Profs. Bache, Mitchell, and Mütter.

From *Med. Dep. of Pennsylvania College*, Profs. Atlee, Patterson, and Wiltbank.

From *Franklin Medical College*, Profs. Rogers, Tucker, and Joynes.

From *Philadelphia Medical College*, Profs. Burden and M'Clintock.

From *Philadelphia Medical Society*, Drs. Bell, Emerson, Parrish, Norris, West, Ashmead, B. H. Coates, Bond, Morton, Yardley, Griscom, and Rodman.

From *Northern Medical Association of Philadelphia*, Drs. Janney, Naudain, Uhler, Remington, M. B. Smith, and Jewell.

From *Lancaster Co. Medical Society*, Drs. Humes, Atlee, Kerfoot, Eshleman, Winters, sen., Duffield and Carpenter.

Virginia.—*Medical Convention of Virginia*, Drs. Welford, of Fredericksburg, Cabell, of the University, W. A. Patterson, of Richmond, and M'Guire, of Winchester.

Ohio.—*Ohio Medical Convention*, Prof. Wright, of Med. Coll. of Ohio, Prof. St. John, of Med. Coll. of Cleveland, and Prof. Butterfield, of Med. Coll. of Willoughby.

Georgia.—*Medical College of Georgia*, Profs. Dugas and Garvin.

Mississippi.—*Mississippi State Medical Society*, Drs. S. A. Cartwright. H. Lipscombe, —— Monette, P. D. Ewing, J. S. Copes, Wm. R. Gist, O. L. Dewees, K. P. Alston, G. G. Banks. W. J. Leake, J. Andrews, Geo. Nicholson, G. Keïrn, T. J. Catchings, W. Jamison, E. D. Turner, ——— Takett, J. R. Sykes, ——— Kilpatrick, Wm. Balfour, ——— Davis, James Maynard, James Chamberlain, and S. C. Farrar.

Kentucky.—*University of Louisville*, Profs. Drake, Cobb, and Yandell.

From *Transylvania University*, Professors Mitchell and Bartlett.

Missouri.—*Medical Department of University of Missouri*, Prof. J. B. Johnston.

Medical Department of St. Louis University, Prof H. M. Bullit.

Tennessee.—*Medical Society of Tennessee*, Drs. J. B. Hays, Stout, Martin, Buchanan, Avent, and Davidson.

Delaware.—Drs. Couper, and Thompson.

Arrangements for the Meeting of the National Medical Convention.

At a meeting of the Delegates to the National Medical Convention from the city and county of Philadelphia, held at the Hall of the College of Physicians, March 9th, 1847, it was resolved to accept the polite offer made by the *Academy of Natural Sciences*, of the use of their spacious Hall for the meeting of the Convention; and the following committee was appointed to make the necessary arrangements for the meetings and deliberations of that body:—Drs. Hays, Condie, Emerson, Fox, Bridges, Norris, Morris, West, and Paul.

The above committee, in furtherance of the objects of their appointment, invite the delegates to the National Medical Convention to meet at the Hall of the Academy of Natural Sciences, west side of Broad Street, near Chestnut Street, on Wednesday, May 5th, at 10 o'clock A. M.

The several standing committees appointed at the last Convention are invited to meet at the same place on Monday morning, May 3d, at 10 o'clock.

To facilitate intercourse between the delegates, they are invited to

report themselves as soon after their arrival in Philadelphia as convenient, to the committee of reception and arrangement, named above, who will be at the Hall of the Academy of Natural Sciences on the 1st, 3d, and 4th of May, from 10 A. M. to 3 P. M., and on the evening of the 4th of May from 7 to 10 o'clock.

The secretaries of the associations who will be represented are requested to transmit, at an early day, the names of their delegates to the chairman of the committee, Dr. I. Hays.

RECORD OF MEDICAL SCIENCE.

Resignation of Professor Warren.—It will be perceived from the following record, that Dr. John C. Warren has resigned the chair of anatomy and physiology, in Harvard University, Boston, which he has long filled with distinguished honour to himself, and great advantage to the school, and that the corporation of the University have shown their just appreciation of his valuable services by electing him Emeritus Professor of Anatomy and Surgery. In his retirement, the Professor will carry with him the best wishes of the profession, of which he has been a distinguished ornament, and for the advancement and improvement of which, we are sure, he will not cease to occupy himself. He has rich stores of experience to lay open, he is also engaged, we know, in scientific pursuits of great interest and importance, and we trust his life may be long spared for their completion, and to enjoy the honours he has justly earned.

At a stated meeting of the President and Fellows of Harvard University, in Boston, Feb 27th, 1847, the President laid before the corporation the following communication from Dr. Warren, resigning his Professorship.

[Here follows in the records a copy of Dr. Warren's letter.]

Whereupon voted—That in accepting the resignation of Dr. J. C. Warren, as Hersey Professor of Anatomy and Surgery, this board is deeply sensible of the important services rendered to the University by Dr. Warren; and holds in grateful recollection the successful exertions made by him, for a period of more than forty years, and in continuance of those of his honoured father, to raise the character, and promote the interests of the medical school.

Voted—That Dr. Warren be requested to continue in the discharge of the duties of his office, till the close of the present Academic year.

Voted—That the President be requested to communicate to Dr. Warren a copy of the foregoing votes, with the assurance that this

board cordially reciprocates the friendly and respectful sentiments expressed towards the corporation and the University, in his letter of resignation.

On vote, by ballot, Dr. John C. Warren was chosen Emeritus Professor of Anatomy and Surgery in the University, in consideration of his faithful and valuable services as Hersey Professor of Anatomy and Surgery.

A true copy of the record.

Attest, JAMES WALKER, Secretary.

Amer. Journ. Med. Sciences.

New Professors in Harvard University.—We learn that the Corporation of Harvard University, since the resignation of Dr. Warren, have appointed three new professors, two of whom are to be attached to the Massachusetts Medical College in Boston, and one to the University at Cambridge. The new incumbents are Oliver W. Holmes, M. D., Professor of Anatomy and Physiology; John B. S. Jackson, M. D., Professor of Pathological Anotomy, and Curator; and Jeffries Wyman, M. D., Hersey Professor of Anatomy at Cambridge.—*Bost. Med. and Surg. Journ.*

Abstract of a Letter from DR. N. S. JARVIS, Surgeon U. S. Army, dated Monterey, Mexico, Oct., 1846, embracing several Surgical Cases, which fell under his Treatment and Observation.

After stating matters of a private nature, Dr. Jarvis continues: "On the 19th of September we encamped within four miles of Monterey, in a grove of Peccan trees, called "Walnut Grove," where we were abundantly supplied with clear and cold water, from a stream of considerable size and rapidity, formed by the junction of numerous springs, which took their rise in the surrounding lime-stone rocks. The combination of wood and shade rendered this spot admirably fitted for an encampment. On the following day parties were employed in reconnoitring the enemy, and in observation of the fortified position of the town. Towards evening my Regiment, 3d Infantry, with another, were advanced a mile towards the town, to cover a party of engineers, engaged in the erection of a mortar battery, but returned to camp about 9, P. M., having been relieved by another regiment.

On the morning of the 21st the whole division was thrown forward towards the city, with a view, as we supposed at the time, of making a diversion in favor of the 2d division, under Gen. Worth, which was moving on the western side of the city by the Saltillo road. Few of us supposed, as we silently marched along, occasionally passing through corn fields and by the side of hedges, or whatever could conceal our movements from the enemy in their batteries, that we should so shortly be engaged in a fierce and deadly strife. As soon as, or in fact before, we emerged from under cover, the batteries from either end of the city opened their fire upon us, completely sweeping the plain in every direction, and enfilading the advancing columns of our

troops, now rapidly marching towards the suburbs. The engineer officer having reported the practibility of attacking with success the rear of some of their forts, the 1st, 3d, and 4th Infantry were ordered to advance rapidly by separate roads, and now it was my professional labors commenced; the nearest and only shelter that presented itself to me for the wounded, falling every moment under a most destructive fire, was a quarry pit, four or five feet in depth, and the same in breadth. Several of these were contiguous, and to them I directed the wounded to be carried. By stooping we were protected from the shots, which, however, became every moment thicker, owing to the fact, that our troops had by this time advanced within range of the enemy's fire, and the moment they perceived a party of men bringing the wounded to us, they directed all their guns upon it. I had already performed one amputation, and was preparing for a second, when two or three fugitives rushed into the pit, falling over the wounded that lay there crowded together, saying that a large body of lancers were approaching. So little credit did I attach to their report, which I ascribed rather to their fears than the actual presence of this dreadful description of troops, that I never raised my eyes to observe them; which circumstance doubtless saved us all. Had I been discovered, all would have been massacred, as in their headlong fury, they would neither have delayed to ascertain our character or profession, nor have paid much respect to our patients. Several soldiers who had sought an adjoining pit with an officer were slain. They were soon after repulsed by a regiment of Ohio and Mississippi Volunteers, marching to reinforce those already in the town, and their retreat was farther quickened by a shower of grape opened upon them by our artillery.

I commenced with a determination of giving you a surgical history of the actions of the 21st, 22d, and 23d September, but have unintentionally thus far given a military narrative. This, however, will show, in the incidents above narrated, that the military surgeon is at times somewhat unpleasantly situated, when in the discharge of his professional duties, deprived as he is of the security, and many of the appliances enjoyed by his fellow practitioner in civil life.

The first wounds were received in crossing the plain, and were inflicted by grape and cannon-shot. This was of course before we had approached within reach of their musketry. These wounds were all low: generally at, or just above the ankle, according to distance and direction. Of the first three men brought to me, two had received wounds from twelve pound shots just above the ankle, which had nearly severed the limbs, which were hanging only by a portion of integuments. The other had his heel torn off by a six pound shot. Shortly after, our troops having advanced within reach, and under the fire of the Mexican Infantry, numerous cases of wounds by musket and escopette* balls were brought to me; these latter are one-third

* An escopette is a short carbine, similar to a blunder-buss, and carries a ball one-third larger than our musket—M.

larger than our musket-balls, and consequently inflict a more severe and formidable wound. So numerous at this time became the wounded in our pit, and so constant and heavy the fire, directed towards the parties approaching with the wounded, as to compel us to remove our hospital several hundred yards farther in the rear. We had not long been in our new position, when some covered wagons bringing the wounded attracted the attention of the enemy, who immediately re-opened their fire, compelling us a second time to remove beyond the range of their shot.

Among the numerous projectiles, occasioning severe and fatal wounds, were grape, canister, fragments of iron and copper shells, and stones knocked by the balls from the buildings and walls. Their shells were thrown with great accuracy, frequently in the midst of a body of troops, but fortunately killing and wounding but few.

Before speaking of any particular wounds, I will here take occasion to make some remarks respecting the character they assumed, and the peculiar causes acting to prevent a favorable result, so far as regarded the healing of all, even the most slight. The first annoyance we experienced, and which no doubt exerted an injurious effect, was one little anticipated at the time. The moment a limb was amputated numerous flies would alight on the stump, and must have deposited their eggs, for when it became necessary to dress the stump, myriads of maggots were found buried in it, which could be expelled with great difficulty; rendering it necessary in some instances to reopen the flap, for their complete extermination. A much more formidable enemy made its appearance in an erysipelatous inflammation of the integuments, covering the stump, which generally set in two or three days after the operation; and notwithstanding all the means made use of to arrest it, most commonly ended in sloughing, and either proved fatal or rendered a second amputation necessary. That some influence existed previously, either external or internal, from causes connected with the state of the atmosphere, or habits of the men, arising from diet or water, was manifest. The slightest wound or scratch became in every case a tedious ulcer, in some instances proving a cause for serious alarm. Apparently the most trifling wounds required an unusual time for healing, and even those that had previously healed would break out again, and present greater difficulty in their cure than in the first instance.

At this period no atmospheric causes apparently existed to produce this unfavorable aspect of things. Nothing could exceed the loveliness of the weather, if I may so express myself, and if the middle of the day were warm, the morning and evening refreshed us by a most delightful temperature and cloudless sky. No rain had fallen, with the exception of one or two showers, for nearly a month, and consequently little moisture existed to produce its well-known morbific influence. Immediately after the capitulation of the city, on the 25th of September, all the wounded of the different divisions entered the town, and suitable buildings were provided for their accommodation. Upwards of two hundred officers and men from the 1st and 3d

Divisions, who had been most severely wounded, were conveyed thither on the same day in litters and wagons. The wounded of the 2d Division already occupied the city.

Our camp afforded no comfort nor shelter for them beyond a few small tents and a solitary blanket laid on the ground: and many were destitute of even this apology for a bed, having lost them on our march. Many had no other clothing than that in wear, which was not only torn and soiled in climbing over the hedges, walls, &c., during the battle, but was stiff and saturated with blood from their wounds. A few days after their reception into the hospitals, tertian intermittent fever made its appearance, attacking many of the wounded, and, in the majority, retarding or completely arresting convalescence. On many of those severely wounded it exerted a decidedly pernicious influence, and no doubt contributed, in some cases, to a fatal termination. It not only attacked the wounded in the hospitals, but prevailed extensively in camp and among the population of the town and neighboring country. I cannot say to what extent, this may be attributed to the putrid exhalations arising from the numerous bodies of men and horses slain in the different combats, and which had been slightly covered with earth, and emitted a most sickening and offensive effluvia. This, doubtless, contributed largely towards infecting or destroying the purity of the air, and establishing a poisonous miasm.

With these preliminary remarks, I will now give you an outline of a few of the more interesting cases resulting from gun-shot wounds, received during the three days' attack on Monterey, and which came under my observation at the time. With a view to some order and classification, I will describe first those of the head and face.

Case 1.—Corporal Sherridan, 1st Infantry, was struck by a musket-ball on the anterior and central portion of the os frontis, destroying it for a distance of two inches. Considerable portions of the brain issued from the wound, and notwithstanding the severity of the case, the patient appeared to suffer little or none until the third or fourth day, when, coma supervening, followed by delirium, he died.

Numerous wounds of the scalp, accompanied in three cases by destruction of the periosteum and outer table of the skull, came under my observation, but presented nothing new or different in their character and progress from ordinary cases.

Case 2.—Private Redville, of the 3d Infantry, in passing a stone wall, received a wound in the right eye, as he supposed, from a fragment of stone broken from the wall by a cannon-ball, and which struck him with force sufficient to knock him down. I saw him two or three hours after the injury was received, and found his eyelids so much swollen, as to render it very difficult to ascertain the condition of the eye itself. In placing my finger over the inner canthus, I felt a sharp point, apparently of some hard substance. This I immediately extracted with a pair of common forceps, and found it to be a fragment of grape, three-quarters of an inch in length, and half an inch in width at the centre, of an oblong or elliptical shape. It was of cop-

per, or an alloy of that metal, and had evidently been broken off by striking the wall. On examining the eyeball I found it uninjured, the fragment having passed between it and the inner canthus, and penetrated to the posterior wall of the orbit, destroying the lacrymal sac, the os unguis, and wing of the sphenoid bone. Considerable inflammation and suppuration followed, and although at the present time the wound has entirely healed, the pupil remains permanently dilated, and vision destroyed. This seems to indicate an injury of the optic nerve, which the missile from its length must have reached and destroyed.

Case 3.—Private Jones, of the same regiment, was wounded about the same time by a musket-ball striking him near the angle of the inferior maxilla, on the right side, fracturing the bone, passing directly through the tongue and the corresponding portion of the bone on the opposite side. The tongue was completely severed at its base, hanging only by a few muscular fibres. The patient was almost moribund when brought in, and died shortly from excessive hæmorrhage.

Case 4.—Major. L., commanding the 3d Infantry, received a wound from an escopette-ball directly in the centre of the upper lip. The ball passed obliquely backwards and to the left, tearing away the bony palate, aud completely destroying the upper maxilla and malar bone of that side, and, fracturing the condyle of the inferior maxilla, passed out behind the ear near the mastoid process. The velum pendulum palati was completely separated from its superior connections and rested on the tongue. The whole of the alveolar process, together with the teeth on the left side was carried away. To enable him to articulate, as well as swallow, I contrived to fasten up the pendulous palate by a stitch, and afterwards by a ligature placed around the remaining incisor tooth, with a view of afterwards endeavouring to effect a union with the parts from which it was torn. I subsequently secured it more completely by a strong ligature passed through it in two places, the ends being brought together, and by means of a probe carried up through the nostril and fastened with adhesive plaster to the forehead. Intense inflammation followed, involving the whole side of the head, and during several days pieces of bone were being constantly separated and discharged. The previous ill health of this officer rendered his case the more unpromising. He had suffered for two or three years from severe and repeated attacks of asthma, which had so enfeebled his general health that the least exposure or fatigue was attended by intense suffering and danger of death. Up to the present time nature has made but little recuperative effort, in consequence perhaps of an attack of intermittent fever, which, in many cases, thus acts in retarding the healing process.*

Case 5.—A private of Col. Hays' mounted Texan Rangers was wounded on the 21st in an attack made on the eastern side of the city. A copper grape shot striking him at the same point as in the pre-

* This officer died a few days afterwards.—M

ceding case, passed obliquely backwards and downwards, wounding the tongue and fracturing the lower jaw on the left side near its angle; then coursing along the neck, beneath the integuments and muscles, lodged near the insertion of the left sterno-cleido mastoid muscle into the clavicle, where it was cut out. Fragments of bone came away, and considerable inflammation, with difficulty of swallowing, followed, but the wound progressed favourably, and notwithstanding the size of the shot and destruction of parts, is at the present time nearly healed. His head is considerably drawn down, and a rigidity of the jaw, with inability to speak, remain.

Case 6.—The sergeant-major of the 5th infantry was wounded on the 22d, the ball entering near the same point as in the two former cases, but passing obliquely backwards and upwards *above* the roof of the mouth, and lodging near the articulation of the jaw on the right side, between the coronoid process and masseter muscle. It was subsequently extracted, and the wound at the present moment has entirely closed, leaving, however, as in the former case, more or less immobility of the jaw.

Case 7.—Private Lewis, of the 1st Mississippi Regiment, was wounded on the 22d September. The ball struck him at the lower point of the lobe of the ear, and posterior edge of the ramus of the inferior maxillary bone on the left side. After fracturing this bone midway between its angle and articulation, the ball passed transversely inwards, tearing away the back part of the palate, and came out through the right malar bone. This case progressed favourably, and the wound at the present time is nearly healed. Some deformity, arising from ossific matter thrown out in the union of the jaw, and a certain degree of immobility remain. The close vicinity of the carotid artery to the point of entrance of the ball, and its entire escape from injury, renders this case doubly interesting.

The next order of wounds are those of the neck, thorax and abdomen, many of which, of an interesting character, presented themselves during the engagements, but the limits of my letter warn me I must reserve them for a future occasion. I will, however, describe a few cases of wounds of the pelvis and bladder, presenting some singularity in the direction and force of the balls, and interesting in the nature and result of the injuries they inflicted.

Case 8.—Lieut. G———, 4th Infantry, was wounded in three places about the same time, on the morning of the 21st September. The most severe wound, however, was one, in which the ball, striking the upper and anterior portion of the thigh, entered the pelvis, wounded the fundus of the bladder, and passed out at the sacro-ischiatic notch. The femoral vessels, in the course of the ball, escaped being wounded in a most remarkable manner. The urine passing freely through the wound necessarily produced considerable infiltration and inflammation of the cellular tissue of the thigh. By changing his position so as to lie on the left side, and introducing a catheter, which was constantly maintained in the bladder, no more urine escaped through the wound, and the inflammation rapidly subsided. No un-

favorable symptoms followed. The usual separation of the parts destroyed in the course of the ball took place, succeeded by a healthy suppuration, at the usual period of gun-shot wounds, and a hope was entertained by his friends of his speedy recovery. This hope was still more strengthened when, on the tenth day after the wound was received, the catheter, by some accident, became obstructed, and remained so some time before it was discovered, and on its withdrawal and re-insertion, upwards of *twelve ounces* of urine were drawn off, showing conclusively that the wound in the bladder must have entirely closed, to enable it thus to retain so large a quantity of fluid. The expression of his countenance, and cheerfulness of manner, would hardly have indicated any great pain or suffering. It was only on the twentieth day that any alarm was excited in the minds of his friends, by his suddenly being attacked by rigors, followed by fever and profuse night-sweats, which, notwithstanding all the means made use of, rapidly reduced his strength, and he expired on the night of the 13th October, and on the *twenty-second* day after being wounded. A post-mortem examination of this case would have proved highly interesting, showing how far wounds of this description, affecting internal hollow organs, may heal, and the manner in which a restoration of the parts destroyed takes place; but the pressure of professional duties at the time has prevented so desirable a finish to the history of the case.

Case 9.—Private Capers, of the Baltimore Battalion, was wounded early on the 21st September. The ball entered directly above the os pubis, and taking a direction downwards and obliquely backwards, wounding in its course the bladder, passed out of the pelvis between the sacrum and tuberosity of the ischium on the left side. It was found lodged between the integuments and glutei muscles, from which point I extracted it. Urine passed freely at the time, from the wound over the pubis, but ceased shortly after the introduction of the catheter, which was constantly maintained in the bladder, as in the former case. Very little tension or tenderness of the abdomen followed, nor any symptoms of peritoneal inflammation, showing that the ball had entered the bladder without wounding the peritoneum.* Neither were there any signs of extravasation or infiltration of urine, and but little or no febrile action. About the tenth day after its reception the wound over the pubis, which had by this time entirely closed, broke out again, discharging urine; this was shortly afterwards followed by the opening of that in the nates, made for the exit of the ball. Through the latter, both fæces and urine, passed, showing that sloughing had taken place, and a communication formed between the rectum and bladder. The contents of both of these were occasionally discharged from the anterior wound. The patient lin-

* The ball entered the bladder externally to the point were the peritoneum is reflected from the posterior wall of the abdomen upon the fundus of the bladder.—M.

gered in this miserable situation until the *sixteenth* day, when he expired, worn out by pain and suffering.

Case 10.—Private Young, of the 1st Tennessee Regiment, was wounded nearly at the same time and place as the above. The ball entered just above the os pubis, and about one inch to the right of the symphysis. It ranged diagonally across the pelvis, inclining downwards, wounding both the bladder and rectum, and passing out through the left sacro-ischiatic foramen, just above the os coccygis; urine and fæces passed out from both orifices of the wound. When brought in, it was supposed, from his general appearance, that he would survive his wound but a very short time. A catheter was introduced immediately, which was retained with considerable difficulty. The wounds were dressed in the usual manner; urine and fæces continued, however, to pass out of the wounds, attended by considerable irritation and febrile action. In this condition he lingered *twenty-three* days, when he expired, worn out, as in the case of Capers, by long-continued suffering.

Having given a brief description, of a few of the gun-shot wounds in the different assaults on Monterey, I will conclude my communication, with a statement of the number and results of the larger amputations, performed on those occasions. The total number in the three divisions of the army was *twenty-eight*, viz: *ten* in the first division, *four* in the second, and *fourteen* in the third or volunteer division. Twenty were performed on the field, or on the following morning, in the camp; the remaining *eight*, at subsequent periods, varying from five to twenty days. *Twelve* of the number, including *two* in those taken prisoners and operated upon by the Mexican surgeons, proved fatal, and the remaining *sixteen*, have nearly or quite recovered. This average of mortality was not confined to our wounded. I was told by Dr. Hidalgo, surgeon in charge of the Mexican military hospital, that of *thirteen* amputations performed there, *five* had proved unsuccessful, and one case, that had recently been operated upon, appeared to me to be in a critical condition, but whether the patient died or recovered I have not learned.* In addition to unfavorable causes, not enumerated among those I have heretofore noticed, and from which the Mexicans were happily exempt, was the repeated removals to which our wounded were subjected. In carrying them from the field to the camp, a distance of three or four miles, they suffered greatly; and the subsequent removal to town, still farther increased the pain and danger, and in one or two cases, evidently, was productive of a fatal termination.

With a few remarks, on the appearance and condition presented by the two cases of amputations of the thigh, performed by the Mexican surgeons, in their hospital alluded to above, I will close. One of these had been operated upon on the same day with the injury, and the other some four or five days after. Neither stump on examina-

* This case subsequently proved fatal.

tion, after the removal of the dressings, presented any unusual appearance; on the contrary, the flaps had been neatly adjusted and brought together, and kept so by a number of interrupted sutures and adhesive straps, encircling it in every direction, and adhesion had apparently taken place, in one case along the line of divided integuments. No one, judging by the external appearance of the wound, if we except a degree of paleness of the integuments of the flap and some fœtor, would have suspected the condition and extent of disease within. On dressing the first case and removing the lint and adhesive straps, which had become somewhat offensive, the edges of the flap receded or partially separated, so as to reveal a large cavity or excavation, the whole surface of which was dark and ill-conditioned, and from the centre projected the end of the bone. There were no signs or appearance of suppuration or granulation having ever taken place in the divided muscles; on the contrary, they appeared absorbed or attenuated by previous discharge, of which none existed at this time. The patient rapidly sunk, and died on the fourth day after his admission into the Division hospital.

Private Alexander, of the Baltimore Battalion, the other case, was brought to our hospital some two days after the one above. His stump presented nearly the same appearance as the first, with no indications whatever of the diseased condition within. Eleven days after his admission, the flap gave way, disclosing the same appearance as in the former case, with most intolerable fœtor. Gangrene rapidly extended, and he died on the *twelfth* day after his admission, and the *thirteenth* from the time of the operation.

Among other consequences arising from gun-shot wounds, in my hospital, were two cases of traumatic tetanus, both of which proved fatal. The first case manifested itself seven days after the injury, which was a wound of the knee-joint, with a fracture of the patella by a grape-shot. The man was brought from the camp of the 4th Infantry to the Division hospital, and was attacked a few hours afterwards, by opisthotonos, followed by trismus and severe spasmodic action of all the muscles of the body. He died the same night. The other case originated from a gun-shot wound of the left thigh, in which the ball passed down to the femur, six inches below the trochanters, and taking a direction upwards on the outer side of that bone, denuded it entirely of the periosteum for the distance of three or four inches, and was cut out from beneath the gluteus maximus muscle of the same side. Here the first semptoms manifesting an attack of this dreadful disease was violent spasmodic action of the muscles of the injured limb, which soon extended to those of the whole body, followed by trismus and a certain degree of opisthotonos. He expired on the *fifteenth* day after receiving his wound, and nine days after being received from the Mexican hospital; having been taken prisoner and carried thither on the 21st September, the day on which he was wounded,—*New York Jour. of Med.*

Remarks on the Medical Topography of Texas, and on the diseases of the army of invasion. By George Johnson, M. D., late Surgeon in the United States Army.—The Brazos Santiago Island, Texas, has become a place of much importance since the present war with Mexico commenced. From May last to the present time, all troops, destined for the "army of occupation and invasion," have been landed at the Brazos, and on account of the difficulties of transportation at the commencement of the war, many of the regiments remained encamped upon the island for several weeks. During the last summer, most of the volunteer regiments have been stationed along the banks of the Rio Grande, between Matamoras and the mouth of the river. Much has been said in the newspapers, and elsewhere, of the unhealthfulness of this region, but I have not seen the true causes assigned for the great mortality which has occurred amongst our troops upon the Rio Grande; I will, therefore, at your request, give you a brief sketch of the medical topograpy of this region, together with some of the causes which have led to this mortality. Hereafter I hope to see this subject discussed by the medical officers of the army, many of whom have had far better opportunities than fell to my lot for obtaining correct information on this head, particularly those accomplished surgeons, Drs. Wood and Wells, at Point Isabel, and Dr. Wright and his assistants, at the general hospital at Matamoras.

The Brazos Island, it might be inferred from the many statements that have been made, is particularly unhealthy, from its location. This, I think, cannot be the case. Though a dreary and uninteresting sand bar, I believe it to be as healthy as Galveston, or any other spot along the Gulf coast. The island is about four miles in length, and one and a half in breadth. It would be almost level with the Gulf, but for the sand hills which line its southern extremity for half a mile. There are some two or three ponds on the island, called on the maps of the country, fresh water ponds, though I found them quite salty on trial. These ponds are situated about a mile and a half from the sand hills, (the place of encampment of the troops,) and to the north. The sea breeze blows almost continually from the south-west, so that no deleterious effects can arise from them. This breeze usually commences about 9 A. M. and continues throughout the night, making sleep delightful and refreshing. By it the sun's heat is rendered less oppressive, and there was not a day so warm, during our stay upon the Island, which was during the month of June, as to prevent the men of our regiment from perambulating it from end to end, on fishing and hunting excursions. Here, too, the men enjoyed the pleasure and benefit of bathing. I have understood that the Mexicans considered the Brazos healthy, prior to the arrival of our troops, and I learned from an American woman, a native of North Carolina, who has lived upon the Island for several years, that her family, consisting of six children, had enjoyed excellent health since her residence there. Yet she had occupied, during the whole time, a miserable little shed, only partially covered with ox hides.

The Mexicans who were taken prisoners at Palo Alto and Resaca de la Palma, were employed in the Quartermaster's department, at the Brazos, and though these men were exposed, day after day, to the heat of the sun, in their labours about the shipping, yet I never knew a case of sickness to occur amongst them. The other employees of the Quartermaster's department, such as teamsters, carpenters, etc., also retained their health, whilst the troops at the same period, were suffering with diarrhœas and dysenteries. I accounted for this circumstance, thus: these teamsters were making daily trips to the mouth of the Rio Grande, (nine miles,) and they kept their messes well supplied with the excellent water of that river. Besides, they had learned to cook their food properly, and they slept in the dry and comfortable Government storehouses, whilst the troops were lying under tents, upon the wet sand, eating food that was only partially cooked, and drinking the brackish water from the wells that it was almost impossible to retain upon the stomach.

It is known to all military men, and to the profession, that dysenteries and diarrhœas are camp diseases, and are common to every location where troops are encamped for a few weeks. Our regiment was encamped for about a week at Algiers, opposite New Orleans, and it was very rainy weather during the time; in consequence, dysenteric affections became numerous. At the present time, the troops stationed at Santa Fe are suffering severely with these diseases, and it will not be denied that Santa Fe is a healthy town.

The water used by the troops at the Brazos, is obtained by digging small wells in the sand, usually to the depth of two feet. The water obtained from a well recently made was not very unpalatable, being the rain water contained in the upper surface of the sand, but in a short time the salt water from beneath would be mixed with it, thus rendering the well useless, so that new wells were constantly being made, and as the space occupied by the troops was only about half a mile in extent, and one hundred and fifty yards wide, (in rainy and stormy weather all the rest of the island being covered with water,) and as this sand hill ridge has been occupied by troops since the 20th of May last, even as many as three regiments have been stationed here at one time, it can readily be understood how the water of this ridge is affected.

The troops that have, from time to time, sojourned at the Brazos, have been for the most part volunteers, and they have had much more to learn than the drill and discipline. They have been compelled to take a few lessons in the culinary art—particularly so far as related to the cooking of pork and beans—a knowledge of which was not obtained until the pains of colic had been experienced more than once. It would be fair to say that the beans of every volunteer regiment are not half cooked, for, at least, the first month of service. Besides, the young soldier is apt to indulge in every excess. He will lie down on the wet ground without his blanket. The old soldier is more prudent—he may drink a little too much whiskey, (if he can get it,) but he will not expose himself unnecessarily to the sun's heat at mid-day,

in fishing or hunting. Neither will he eat the coarse and unwholesome food that a recruit will swallow with avidity. The old soldiers of our regiment were the only men who would not indulge in eating red fish, oysters and crabs, whilst on the island. They were influenced, in part, by the example of the Mexicans, who eschew these luxuries during the summer months.

The country between Matamoras and the mouth of the Rio Grande, is low, with lakes every few miles, between which is interspersed the chapparel and prairie—the only elevation being the ridge of Burita, upon which the village is situated, and one nearly parallel with it on the opposite side of the river. These ridges, commencing at Burita, extend up the river about a mile. These elevations have been occupied by troops during the last summer, and I can speak for those encamped upon the ridge of Burita, as having enjoyed a very good share of health. There was a marked improvement in the health of the St. Louis Legion, after they encamped here. Red fish, oysters and crabs, could not now be obtained. Good water was within reach, and the beans were boiling in the camp kettles at an earlier hour than formerly. Here, too, was felt the delightful and invigorating sea-breeze, but sleep was not so sweet as at the Brazos. Centipedes, (some of them six inches in length,) tarantulas, and other venemous and creeping things, would travel over a man's nose, occasionally, and wake him up before reveille.

Immediately south of Burita, there is a fresh water lake of considerable size, and about half a mile on the opposite side of the ridge there is a salt lake. Fresh and salt lakes may be seen in close contiguity in this vicinity.

The Mexicans in Matamoras, and those who live at the ranches in the neighborhood, are as healthy a looking people as I ever saw. I visited, during the months of July and August last, many ranches, where I saw children, and I do not remember to have seen one child that had an unhealthy appearance. In many regions of this (Mississippi) valley, during the same months, it would not be surprising to find half the members of every family labouring under remittent and intermittent fevers. The only sick Mexican I saw whilst in the country, (except the wounded in the Hospital at Matamoras, (was a woman with intermittent fever, at Brazos Island. I was afterwards informed by an old Frenchman, who had lived for many years on a ranche near Matamoras, that the fever and ague was the only disease that prevailed in the neighbourhood, but that the "chills" were not as severe as those he used to have in Louisiana—here the patient got well in a few days, without, perhaps, being obliged to keep the bed.

I have remarked that the Mexicans have, universally, good teeth—an indication, certainly of good health, and I venture the assertion that there are as many old people, according to the population, as can be found in any part of the United States. I will further state, that in Matamoras, I became acquainted with several American merchants who had resided in that city for several years. They informed me that the country was healthy—that they had enjoyed better

health in Mexico than in the United States. I therefore believe that the great mortality amongst our troops upon the Rio Grande, during the last summer was owing to the imprudence of the men—to bad cooking—to a neglect of proper police, in most of the volunteer regiments, and to the necessity which compelled the soldier to lie upon the wet ground during a wet season.

In order to show the number of diarrhœa cases, in comparison with all other diseases, I will here give an extract from my monthly report of "sick and wounded" for June. The regiment, during that month, was stationed at the Brazos Island.

NAME OF DISEASE.																		REMAINING.			MEAN STRENGTH.		
Diarrhœa.	Dysentery,	Remittent Fever,	Intermittent Fever,	Ulcers,	Catarrh,	Rheumatism,	Opthalmia,	Erysipelas,	Pleurisy,	Asthma,	Hernia Hæmoralis,	Gonorrhœa,	Syphilis,	Colic,	Wounds,	Total,	Returned to duty,	Discharged from service,	Dead,	Sick,	Convalescent,	Total,	Officers,	Men,	Total,
170	9	36	18	7	7	6	2	7	4	2	1	2	3	8	4	286	229	12	1	38	19	57	30	601	601

Most of these cases of diarrhœa were preceded by colic, and could be traced to some imprudence in eating. The most successful mode of treatment I found, was to empty the bowels with castor oil, particularly when there was tenderness or pain over the region of the abdomen, and then to administer large doses of opium, 3 or 4 grains, at intervals of four hours, until the bowels were constipated, and after waiting forty-eight hours to give a dose of castor oil and laudanum. This was the only plan of treatment that was curative. Hyd. cum. cocta. dover's powder, with calomel, etc., were given without success at first. Though the cases of diarrhœa were so numerous, yet we did not lose a man of our regiment with that disease.

Most of the cases of remittent and intermittent fevers supervened upon diarrhœa. The remittent fevers were of a low form and very obstinate in their character. What retarded recovery, especially in these cases, was a despondent state into which almost every patient sank. After a man had suffered with fever for a week, he either made up his mind to die, or became so dejected that it was almost impossible to persuade him that he would recover, or to rouse his feelings in any way. I saw a few cases of pure nostalgia, and I believe there were many such, during the first six months of service, amongst the young men of the army. The marasmus, after remittent fever, was striking, and convalescence remarkably slow. These patients had the same cadaverous appearance and haggard expression of countenance as is common to children who are laboring under tabes mesenterica. There was also that loose and wrinkled condition

of the skin of the abdomen which is common in such cases. Diffusible stimulants were very freely given in these cases, and with the most happy effects.

Two cases of wounds came under my notice that are worth mentioning, on account of the result. The first occurred in the Fifth Louisiana Regiment, (Col. Peyton's,) whilst stationed at Burita. Two men, previously good friends, had been drinking together, when an altercation ensued, and one of them drew a large Bowie knife and plunged it into the breast of the other. I reached the wounded man at the same moment with the surgeon of his regiment. On examination, we found a piece of the lung, two and a half, or three inches in length, protruding from the wound, which was about an inch below the left nipple—the knife passing between the ribs, downwards and outwards. The wound was at least three inches in length. After consultation, we concluded to introduce the wounded portion of lung within the thorax, and to close the external wound with the interrupted suture. The man was kept upon the most strict antiphlogistic treatment, and some twelve or fifteen days after, when I last saw him, there was every reason to believe that he would entirely recover. The knife with which this wound was given was two inches wide, and it must have penetrated the lung, four inches. On reflection I am not convinced that our practice in this case was the best that could have been adopted. The wounded portion of lung had only an attachment of three-fourths of an inch, and would it not have been better surgery to have clipped it off than to have replaced it within the cavity of the chest?

The other was a case of gun-shot wound, which occurred accidentally. A man was shot in the left axillæ, with a musket ball; the man who fired the gun being immediately opposite, and about one hundred and twenty yards distant. Being absent from camp I did not see the wounded man until the evening of the second day after the accident. On examination I could find no signs of the ball. The man was laboring under distressing dyspnœa. I learned that he had expectorated blood freely, when first shot, but now his cough was suppressed, and he could not expectorate at all. The left cavity of the chest seemed to be half full of blood, and on raising the man and turning him on the left side, at least half a pint of blood escaped through the wound. The following day he was bled twice, and the treatment was strictly antiphlogistic. About a week after, the track of the ball was plainly to be seen. After passing through the chest it made its exit half way, and just below the spine of the scapula; thence glancing inwards and downwards, lodged near the spinous process of the twelfth dorsal vertebræ, where I extirpated it. Beattie, the man whose wound I have just been describing, lives in this city. Prior to the accident he was a robust and healthy man, but he has now become thin and wan, and is frequently troubled with a cough.

St. Louis Med. and Surg. Jour.

Case of Doubtful Sex. By Wm. James Barry, M. D., of Hartford, Conn.—In March, 1843, I was requested to examine the case of Levi Suydam, aged 23 years, a native of Salisbury, Conn. At the exciting and warmly contested election of the spring of this year, almost everything bearing the semblance of the human form, of the male sex, was brought to the ballot-box. It was at this time, and under these circumstances, that the above mentioned person was presented, by the whigs of Salisbury, to the board of Select-men, to be made a freeman: he was challenged by the opposite party on the ground that he was more a female than a male, and that, in his physical organization, he partook of both sexes.

The following was the result of the first examination. On exposing his person, I found the mons veneris covered in the usual way, an imperforate penis, subject to erections, and about two inches and a half in length, with corresponding dimensions, the dorsum of the penis connected by cuticle and cellular membrane to the pubis, leaving about one-inch and a half free, or not bound up, and towards the pubic region. This penis has a well formed glans with a depression in the usual place of the meatus urinarium, a well defined prepuce, with foramen, &c. The scrotum not fully developed, inasmuch as it was but half the usual size, and not pendulous. In the scrotum, and on the right side of the penis, one testicle of the size of a common filbert, with spermatic cord attached. In the perineum, at the root of the corpora cavernosa, an opening through which micturition was performed, this opening large enough to admit the introduction of an ordinary sized catheter. Having found a penis, and one testicle, though imperfectly developed, and without further examination, I gave it as my opinion, that the person in question was a male citizen, and consequently entitled to all the privileges of a freeman.

On the morning of the 1st Monday in April, (Election day,) I was informed that Dr. Ticknor would oppose Suydam's admission. Suydam came forward, Dr. Ticknor objected. I then stated to the meeting, that from an examination I had made, I pronounced the person in question to be a male, and requested that Dr. Ticknor might, with the consent of Suydam, retire into an adjoining room, and examine for himself. This was done, when Dr. Ticknor stated to the meeting that he was convinced that Suydam was a male. Suydam accordingly was admitted a freeman—voted—and the whig ticket carried by one majority!

A few days after the election, it was told me that Suydam had regular catamenia. I then commenced further investigations, and learned from Mrs. Ayres, the sister of Suydam, that she had washed for him for years, and that he menstruated as regularly, but not as profusely, as most women. I next saw Suydam, who very unwillingly confessed that such was the fact. I then requested him to meet Dr. Ticknor and myself the next day at my office; when the following additional particulars were elicited. Said Suydam is five feet two inches in height, light colored hair, fair complexion, with a beardless chin, and decidedly of a sanguineous temperament, nar-

row shoulders, and broad hips; in short, every way of a feminine figure. Well developed mammæ, with nipples and areola. On passing a female catheter into the opening through which micturition was performed, and through which, he again stated, he had a monthly, periodical, bloody discharge, instead of traversing a canal and drawing off urine, the catheter appeared to enter immediately, a passage similar to the vagina, three or four inches in depth, and in which there was considerable play of the instrument. He stated that he had amorous desires, and that, at such times, his inclination was for the male sex; his feminine propensities, such as a fondness for gay colors, for pieces of calico, comparing and placing them together, and an aversion for bodily labor, and an inability to perform the same, were remarked by many.

I further learned from an old lady who was present at the birth of Suydam, that on the second day after his birth, Dr. Delamater, who attended as accoucheur, made with an instrument, the opening through which he has ever since performed micturition.—*New York Jour. of Med.*

Death by Strychnine—Report on the case of the late Dr. W. C. Warner.—At a late meeting of the Addison County Medical Society of Vermont, the undersigned were appointed a committee to ascertain the facts in the case of one of their members, the unfortunate William Cullen Warner, M. D., of Bristol, who deceased, suddenly, at Montpelier, October 11th, 1846, in the thirty-ninth year of his age, while he was a member of the Legislature.

On account of there having been considerable discrepancy in the published reports in relation to this melancholy event, the committee addressed letters of inquiry to the Hon. Daniel O. Onion, M. D., of the Vermont Senate, and to Charles W. Horton, M. D., Member of the House, each of whom, they had learned, were present during most, if not all, the period of the sudden and tragical event. To the inquiries of the committee, each of these gentlemen has given prompt and satisfactory replies, which in substance are here subjoined.

1. In your opinion how much sulphate of strychnia was taken?

To this Dr. Onion answers, "I think probably from one-fourth to one-half a grain. As he intended to take, and supposed he was taking, morphia, he would be likely to use the same quantity he was in the habit of using of that article, although there was no evidence at the time of the quantity taken." To Dr. Horton, who was called into the room immediately after the accident, Dr. Warner said, "Dr., I have taken by accident an over dose of morphine; help me if you can," at the same time handing him the phial enveloped in paper.

2. How soon after was any effect produced?

Dr. Horton says, "It is my opinion, from facts subsequently obtained from Gen. W. Nash, who occupied the same room with him, that he felt the effects in less than five minutes."

3. What was the first symptom?

Dr. H. replies, "constriction of the throat and tightness of the chest, with rigidity of the muscles in attempting to move." Dr. O. says, "He first complained of a want of air, and requested the window to be raised; whether it was from faintness or a constriction about the respiratory organs, I do not know, although I think the latter."

4. What symptoms ensued from the first till death occurred?

Says Dr. O., "When I first saw him, he was lying upon the bed in a complete *tetanic convulsion;* his head somewhat drawn back; his countenance completely livid, with some frothy matter issuing from his mouth, with frequent moans. The palpebra constantly in motion. This first paroxysm may have lasted some five minutes, which was succeeded by an interval of partial calm." "During this interval," continues Dr. O., "it was somewhat difficult for him to articulate with distinctness. He made several attempts to vomit in this interval, by exciting the fauces with his finger. There seemed to be some constriction about the throat, as it was difficult for him to swallow." "This interval lasted perhaps five minutes, when another paroxysm commenced by a little starting and stiffening of the extremities, and immediately the whole body was thrown into a tetanic paroxysm, in appearance like the first, and lasted two or three minutes, when death ended the struggle."

"In about three minutes from the first paroxysm," says Dr. H., "the tetanus again returned, and in the space of two minutes death closed the scene, with terrible spasms of the entire system. The pulse remained unaffected till the last struggle. It is my opinion that the immediate cause of death was suspension (?) from spasm."

"His appearance," says Dr. O., "led me to believe that death ensued from asphyxia or suffocation. There must have been great congestion of the brain, which of itself might have proved fatal."

5. How soon after taking the article did death occur?

Dr. H. says, "From the best information which I could obtain, I should judge that death ensued in fourteen minutes." "The time from taking the article till death ensued," Dr. O. remarks, "could not have been over twenty minutes."

6. Did his mind remain clear till the last struggle?

"I think," replies Dr. H., "that he was perfectly conscious from the first to the last, except in the paroxysm of tetanus, from the following facts:—1. His appeal which he made to me, as noted in the first article. 2. On loosening his cravat, he requested me to unbutton his vest, at the same time desiring me to take out his gold watch and take care of it. 3. An emetic having been administered, he applied his finger to his throat to provoke a nausea. 4. And. from the last words he uttered, '*I fear, I fear, O God deliver me.*'"

7. What means were used to prevent the fatal result?

Dr. H. says, "On witnessing the first symptoms, I left the room for the purpose of obtaining medicine. I procured an emetic of sulphate of copper and ipecac.; but returning and finding him in a tetanus, I immediate dashed cold water on his head, face and breast, and

used the most powerful friction on the extremities. He returned to a state of perfect consciousness. I then proceeded forthwith to administer the emetic, making use of diluents copiously. I sent a messenger for some vinegar and ground mustard, and another for a stomach pump. I used the ground mustard, in warm water freely, to all of which the patient submitted, seeming to be very grateful for the efforts which I was making for his relief. The means were used without any apparent effects." "When death had ensued, a number of the medical fraternity being present, we retired into an adjoining room, when the fatal bottle was produced, with the wrapper still around it. On removing this, it was found labelled 'strychnine.'" Dr. O. states, that "till this time, we were in ignorance of what he had taken." Dr. H. avers, "that here I wish definitely to state, that before the last paroxysm came on, I was fully convinced in my own mind that the fatal drug was not morphia, but strychnia, and I so declared to those present at the time."

From facts before the committee, derived from reliable sources, it appears that on the afternoon of the second day before the fatal accident, Dr. Warner called at an apothecary store in Montpelier, and asked for and purchased what he supposed to have been a bottle of sulphate of morphia. This was handed to him by the apothecary enveloped in a brown paper and twisted at both ends. That on the fatal morning Dr. W. tore off the envelope surrounding the mouth of the bottle, and took a portion of what he supposed to have been morphia. He then proceeded to pour some of the supposed morphia into a small phial in which he had been in the habit of carrying sulphate of morphia, when he was suddenly arrested by the symptoms narrated. It is quite clear that he never entertained any idea of the fatal drug he had taken. "I am certain," says his afflicted brother, "that he never for a moment suspected that he had taken strychnia, and was wholly unconscious of the agency which had produced his awfully unprecedented sufferings."

Dr. W. had never possessed very firm health, and for about two years before his death he had suffered from an inordinate action of the heart, for which he had occasionally taken morphia. This affection of the heart had been the sequence of an inflammatory affection of the chest, which he had early in the year 1844.

The committee have taken considerable pains to ascertain the facts in this melancholy instance of death from a mysterious mistake. The mistake was certainly a singular and mysterious one, both in relation to the apothecary and the unfortunate man. It appears that Dr. W. asked for sulphate of morphia; the apothecary intended and supposed he had sold him morphia till after the fatal event, when he found, through mistake, he had given him, enveloped in a paper, a bottle of sulphate of strychnia in lieu of morphia. This exposition of facts appears to be demanded in justice to the character of the deceased, to the apothecary and to the medical profession.

In a medical point of view, the case is one of much and deep interest, since it so clearly manifests the true and energetic character of

this somewhat new medicinal agent. And in a medico-legal consideration, it may prove of immense importance. In the suddenness of the effects, and in the quickness of the fatality, from the use of strychnia, this case is probably without a precedent. Christison, Pereira, and several monographical writers, in the periodicals, have recorded some bad results, and some fatal cases, from over dosing with this agent; but no instance has fallen under our notice in the human subject in which its administration, either accidentally or otherwise, has so speedily and terrifically proved fatal.

"No poison," says Christison, "is endowed with more destructive energy than strychnia." "I have," he adds, "killed a dog in two minutes with the sixth part of a grain, injected in the form of an alcoholic solution into the chest. I have seen a wild boar killed in the same manner with a third of a grain, in ten minutes; and there is little doubt that half a grain thrust into a wound might kill a man in less than a quarter of an hour. It acts in whatever way it is introduced into the system, but most energetically when injected into the veins."

With the exception of prussic and oxalic acids, there is probably no agent possessing an equally destructive power. Strong prussic acid is well known to be sufficiently energetic to destroy cats or dogs, when properly administered, in less than a minute. And Pereira examined the body of a man who had accidently taken oxalic acid in lieu of Epsom salts, and died in twenty minutes.

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ERASMUS D. WARNER, M. D.,
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Boston Med. and Surg. Jour.

A Case of Pregnancy and Parturition during the existence of Cancer of the Uterus. By JOSEPH A. EVE, M. D., Professor of Obstetrics, &c., &c., in the Medical College of Georgia.—Carcinoma of the uterus was formerly supposed to be incompatible with pregnancy; but the possibility of this complication with this disease in all its stages is acknowledged, and its influence in hastening its progress admitted, by all or nearly all authors who have recently written on the diseases of females. A record of cases, or an allusion to this unfortunate complication, will be found in the works of Clarke, Davis, Ashwell, Churchill, Ramsbotham, Waller, Ferguson, Duparcque, Colombat, Boivin & Duges, Velpeau, Siebold, and many others. But it is, in an excellent practical treatise on Organic Diseases of the Womb, by Mr. Lever, of London, that we find the most satisfactory account of pregnancy in connection with cancer, and the most extensive reference to cases.

Pregnancy and cancer have each a prejudicial influence over the other—the former hastening the progress and fatal termination of the latter; and the latter in a considerable number, I believe in a large majority of cases, causing either an abortion or the death of the fœtus when delivery occurs at the full term. The fœtus sometimes perishes

in utero, its farther development being prevented, and abortion the necessary consequence; in other instances the death of the fœtus is the result of impediment to delivery, from the schirrous enlargement of the mouth or neck of the uterus.

Of one hundred and twenty cases of malignant disease of the uterus, referred to by Mr. Lever, abortion occurred in forty per cent.; in twenty-seven of delivery, fifteen children were born dead, ten living, and in two the result was not known, or we may say fifteen out of twenty-five were lost.

The object of the present communication is to give a brief history of a remarkable case of pregnancy and parturition in connexion with cancer of the uterus.

July 28th, 1845. I was called in haste, eleven or twelve miles in the country, to visit Mrs. ———, who I was informed had been some time in violent labour. There was considerable time lost in consequence of my absence from town. On my first examination I found the head very low in the pelvis, the mouth of the womb extinguished, except a small portion, which had a tumid, hard, rough, unnatural feel. This labor was far more difficult, painful, and protracted than her two preceding labours, in which I had attended her. The child was expelled about a half hour after my arrival. I remarked a smell very similar to that of cancer of the womb, but did not at the time suppose it possible that it could be identical with it, for she was apparently in most excellent health, remarkably robust and stout, weighing not less than two hundred and fifty pounds, and being about twenty-eight years old, and furthermore, as the child to which she gave birth was large and healthy.

Two or three months previous to her confinement, I was consulted by her family physician in reference to a sanguine discharge to which she had been subject for some time, and which I feared might depend on placenta prævia, but which I have no doubt now was consequent on carcinoma. I have since learned, upon enquiry, that as early as January, she complained of severe pains in the region of the uterus, and that in the very commencement of gestation she experienced unusual sensations that caused her for a long time to doubt whether she was pregnant.

After her confinement Mrs. ——— had an offensive discharge from the vagina. On expressing the opinion, when consulted in reference to it, that she was laboring under organic disease of the uterus, I was requested to visit her, October 5th, with a professional friend, and make an examination with the speculum.

The touch discovered an extensive schirrous enlargement of the neck of the uterus. We could not determine satisfactorily the extent of the ulceration by the speculum, because, before we could make a proper inspection, we were compelled to remove the speculum, for she became so excessively agitated that we feared an hysteric convulsion would have been induced.

As she was young and remarkably robust, we considered this was a case in which every possible effort should be made, although even

under such favorable circumstances we had scarcely the slightest shadow of hope—favorable, I mean, in reference to her age, constitution and general health, but quite the contrary when viewed with respect to her recent gestation.

We put her on the internal use of proto-iodide of mercury, and chloride of soda as a vaginal injection, with an occasional resort to the sulphate of morphine, whenever pain might call it into requisition; she was however at this time, and for a considerable time after, comparatively free from suffering. We proposed to apply some cautery, at another visit, when she might be sufficiently composed to bear its application, either the nitrate of silver or nitrate of mercury.

I was requested to visit her again, the 21st of the same month, sixteen days after my first visit. She had not yet lost her embonpoint, but the cancerous ulceration had made most frightful and destructive progress, having involved not only the posterior lip, but the posterior part of the cervix or body. It was now too late to think of anything beyond palliative measures. We advised a lotion of the nitrate of silver, with the view of correcting the fetor and improving the condition of the ulcers, perhaps in some degree checking their course. After this she became subject to most alarming and exhausting hæmorrhages at each menstrual period. She now began to lose flesh, and strength rapidly, and to suffer severe lancinating pains.

I visited her again the 6th of November. The disorganization was still more rapid, far exceeding anything I had ever before witnessed. We endeavored to support her strength by tonics, to alleviate her sufferings by opiates, to restrain the hæmorrhages by styptics and astringent lotions, and to correct the horrible fetor by the chloride of soda.

After the destruction of the posterior lip, posterior portion of the neck and body of the uterus, the ulceration extended through the vagina and rectum, allowing the fæces to pass from the latter through the former, and must have involved even the sacral plexus of nerves from the excruciating paroxysmal pains she suffered in that region.

I never saw her after the 23d December, but was informed by my friend that she continued to linger in the most painful and deplorable condition until the 25th of June, when death kindly released her from sufferings indescribably severe, almost beyond endurance.

It is impossible, from any thing we could learn of the history of this case, to determine how long the schirrus may have preceded the commencement of gestation: it is probable not very long, from the excellence of her general health and the fact that she did not complain of pain, or any unusual sensation in the pelvis, until about the time she became pregnant.

This case is remarkable, from having occured in so young, healthy and robust a subject, from the fact, that the process of gestation was conducted most perfectly, notwithstanding the presence of schirrous certainly, and I think we may safely say cancerous ulceration, from the discharge and the characteristic fetor, parturition only being rendered somewhat more tedious and difficult. But if it is remarkable

for the absence of any obvious effect of the cancer on the gestation, it is still more so for the very marked influence of the latter over the former. After delivery, the progress of the disease was extremely rapid, although in the early age, health and vigor of the patient, it might have been expected to have run a slower and longer course.

Mr. Lever considers twenty months to be the usual or average duration of uterine cancer. Dr. Ashwell concurs with him, if he refers, as he doubtless does, to the stage of ulceration. I would suppose, from my own comparatively limited observation, that the ulcerative stage generally lasts at least twenty months. In this case, there intervened only eleven months between her confinement and her death, although she possessed uncommon vigor of constitution and appeared to resist death much longer than any person could have supposed, considering the ravages of the disease and the intensity of her sufferings. I cannot speak positively with respect to the commencement of ulceration: I would infer, from the hæmorrhages during gestation, and the fœtid discharge during labour, that it existed previous to her confinement; but it certainly had not progressed far, even at my first visit, more than two months afterwards; it was so superficial that it was not evident to the touch, and, as I have remarked, in consequence of her extreme agitation and excitement, the examination by the speculum was not satisfactory. It is singular that ulceration had made comparatively so little progress, between the time of her confinement and my first visit, and so much between my first and second visit. It is probable if I could have made a satisfactory examination at my first visit, a larger ulcerated surface would have been discovered; but after making all due allowance, I am confident, it was very limited compared with the progress made at my second visit.

If I had had an opportunity of examining this patient, during gestation, at the commencement of labour, and a month or six weeks after delivery, these details would have been more satisfactory; but I have related them as particularly as I could under the circumstances. *Southern Med. and Surg. Journ.*

Two Cases of Croup cured by Cauterizing the Larynx with a Solution of Nitrate of Silver. By Wm. N. Blakeman, M. D.—On the 10th Nov. 1846, I was called to see a child of Mr. A. about two years old, very fat, large of his age, and of leuco-phlegmatic temperament. I first saw him at 10 o'clock in the evening, five hours after the commencement of the disease, with a hot, dry skin, quick pulse, great restlessness, laborious breathing, and the hoarse barking or crowing sound peculiar to croup. The family had, previous to my arrival, given freely of Coxe's hive syrup.

I gave tinct. sang., comp. syrup scillæ, with pulv. ipecac., which caused vomiting, but no relief to the patient. At 3 o'clock on the morning of the 11th, I gave six grains prot. chlor. hyd., and after waiting two hours, began with the above mixture, to which I added five grains of tart. antim.; more free vomiting was produced, and a

copious discharge from the bowels, at 8 o'clock, but without any mitigation of a single symptom. I then stopped using the above mixture, and gave per-sulph. of mer., in doses of qu. grain, the second dose to be given in half an hour after the first, and then at intervals of an hour. The child drank freely of warm water, and vomited some after each repetition of the medicine, but none of that peculiar, heavy, glairy substance, which is the secretion of this specific inflammation. At 5 o'clock, P. M., the remedies having done no good, and with the symptoms of suffocation becoming alarming, I resolved to try the effect of cauterizing the larynx with a solution of nitrate of silver, a drachm to an ounce of water.

The application was somewhat difficult, and the dyspnœa very great. A quantity of the thick tenacious substance was brought away by the sponge, &c., a large quantity by vomiting, which followed.

After waiting ten minutes, I made a second application, bringing away a larger quantity of membranous matter on the sponge than before, and a much more copious discharge accompanied the vomiting, caused by the application.

The disease now seemed to be arrested, as very great relief was apparent to all the family. The breathing was less laborious, the crowing sound less sharp, and the child more quiet.

I saw the boy at half past 10 o'clock, same evening, five hours and a half after the first application; he had improved in all the symptoms, breathing decidedly better, the barking sound heard only at intervals, and he had asked for drink,

I now made a third application of the same solution, which brought as before, on the sponge, some thick tenacious matter differing from the first in being of a yellow colour. The boy vomited *several* times after *this* application, each time throwing off a large quantity of the same yellow-coloured, thick substance, so tough that it could be raised from the bowl by the fingers. Soon after the vomiting ceased the child was so much better he fell asleep, in which situation I left him, with directions to be called if required before morning.

12th, 7 o'clock, A. M., I found him sitting on the bed calling for food; he had slept pretty well, asking for drink occasionally, a slight hoarseness left, for which he required no further treatment.

Case II.—I was called on the 20th of January, at 12 o'clock at night, to see a boy six years old, of sanguine temperament, and florid complexion, who was taken about two hours before with croup. The pulse quick, skin hot and dry, the breathing hurried and difficult, the crowing noise loud, and the child very restless. I determined that the remedy used last in the former case should be first in this. I made two applications of the same solution used in the former case. Some tough phlegm came away on the sponge, and free vomiting followed, which relieved the patient so that he fell asleep.

21st, 7 o'clock, A. M. The boy has slept well all night, and says he is quite well, only a little hoarse.—*N. Y. Med. and Surg. Reporter.*

A Spotted Child.—A foundling child was brought to the New York Alms House on Saturday last. It was a little girl about sixteen months of age. About one half of its body was of a fair complexion, and the remainder of a rich copper color, and the dark spots were all covered with a long white hair. In the centre of its forehead was a round dark spot, and the same hue covered the breast and legs.—*Ibid.*

The Patent Letheon—Jackson and Morton's Specification.—It has been repeatedly said that Dr. Jackson is not concerned in the Patent for the Letheon; that Mr. Morton alone has taken out the Letters Patent, and that whatever interest Dr. J. may have in it, arises out of some private contract between them. But it now appears that Dr. J. is really one of the proprietors—that the patent is issued in favor of Jackson and Morton conjointly,

The question has been asked, probably by every member of the profession, "what is patented?" I put the question, the other day, to a gentleman in Boston, who ought to know, and he replied, "The inhalation of the letheon by means of a valvular apparatus." This answer is far from satisfactory, for the same effect may be produced by inhalation of the vapor, without any valvular apparatus at all. If the "apparatus" is an essential part of the patent, the use of a different apparatus would enable any one to evade the penalty of the law. Have they patented the production of insensibility to pain by the inhalation of etheric vapor? No. A physician may administer the vapor, and produce insensibility to pain, with or without the valvular apparatus, without infringing upon the patent. He may administer it for the headache, the heartache or the bellyache, for tic douloureux, asthma or hysterics, and the patent will not reach him. Indeed, I am not quite sure that the patent will reach him if he uses the vapor in reducing dislocations or hernia, or in any operation in which "the knife or other instrument of operation of a surgeon" is not used.

What, then, is the precise thing patented? I answer, the combining with surgical operations the application of ether, or the vapor thereof. This is the whole thing. The use of it in the practice of medicine, by inhalation, is not patented, nor in surgery even, except when connected with operations. They claim the right to use an old and well-known medicine to produce a given result, in the treatment of certain cases. The principle, then, is, that a member of the profession, if he discover that a certain effect may be produced by any remedy or agent in common use, when used in a specified manner, in a certain case or class of cases, which effect had not (to his knowledge) been previously produced by said remedy or agent, he may secure to himself, by patent, the use of said article for producing this specified effect. For instance, should I discover that tinct. digitalis would cure Dixon Lewis, and others similarly affected, of excessive obesity, as it probably would, I might patent the use of tinct. dig. in such cases. If I discover that hydriod. potassæ, applied in a particular way, will cure dry scab, or scurfy eruptions of the skin and scalp,

I may patent this particular use of it, in this class of cases, and require my brethren to pay me a stipulated sum, or a certain per cent. of the fees they may receive, for the right to use it in such cases. Should I discover that tinct. cayenne pepper and tinct. opii, combined in certain proportions, will cure the cholera, I may claim the sole right to use them in cholera, however many persons may be dying around me for the want of them. If some *Yankee* were now in Bagdad, with a few gallons of these tinctures, with their use secured to him by a patent, would not he coin money?

The use of a known remedy to produce a particular effect in any given branch of professional practice, or in the treatment of a given class of cases, is the principle involved. This, so far as I can discover, from a careful examination of the specification, is the exact principle implied in it. As to the rectitude of this principle, professionally, socially or morally, I say nothing. Each one can judge for himself. I believe the illustrations I have used above are correct and appropriate—that is, if surgery and the practice of medicine are parts of one and the same profession. If surgery is a mere mechanical operation, and is to take its place in the same category as other operations in mechanics, then the case is altered. Success in the mechanic arts depends, not only upon the skill with which their processes are accomplished, but often upon the processes themselves, and when a man invents a process by which the same result can be accomplished better than before, he is permitted, by common consent, to enjoy the benefit of his invention for a limited time. If surgery puts in the same claim for its inventions, let it be divorced from the liberal professions—from the "humanities,"—and hang out before its office doors, as in the days of Ben Johnson, a staff wound with a red tape, as a *sign* that "surgery is done here." We all know the origin of the barber's pole; and, Mr. Editor, there is a more close connection between surgery and barbery, than one would at first imagine. Many of the operations of *surgery* are *barbarous*, and the operations of *barbery* are often surgical. Indeed many a poor wight would consider it no small alleviation of one of the miseries of human life, could he inhale the letheon before submitting to the most common operations of barbery. Mem. Barbers may use the letheon without infringing upon the patent. With the above remarks, which have extended much farther than I intended, I send you a copy of the specification, which has recently come into my hands, thinking that it will gratify the curiosity of many of your brethren. Yours, S.

March, 1847.

"*The United States Patent Office.*—To all persons to whom these presents shall come, greeting: This is to certify, that the annexed is a true copy upon the records of this office, of the specification of Jackson and Morton's Letters Patent, dated 12th Nov., 1846.

"In testimony whereof, I Edmund Burke, Commissioner of Patents, have caused the seal of the Patent Office to be hereunto affixed, this twelfth day of February, in the year of our Lord one thousand

eight hundred and forty-seven, and of the Independence of the United States the seventy-first. EDMUND BURKE."

The Schedule referred to in these Letters Patent, and making part of the same.

To all persons to whom these presents shall come: Be it known, that we, Charles T. Jackson and William T. G. Morton, of Boston, in the County of Suffolk and State of Massachusetts, have invented or discovered a new and useful improvement in surgical operations on animals, whereby we are enabled to accomplish many, if not all operations, such as are usually attended with more or less pain and suffering, without any or very little pain to, or muscular action of persons who undergo the same; and we do hereby declare that the following is a full and exact description of our said invention or discovery.

It is well known to chemists that when alcohol is submitted to distillation with certain acids, peculiar compounds, termed *ethers*, are formed, each of which is usually distinguished by the name of the acid employed in its preparation. It has also been known that the vapors of some, if not all these chemical distillations, particularly those of sulphuric ether, when breathed or introduced into the lungs of an animal, have produced a peculiar effect on its nervous system; one which has been supposed to be analogous to what is usually termed intoxication. It has never (to our knowledge) been known until our discovery, that the inhalation of such vapors (particularly those of sulphuric ether) would produce insensibility to pain, or such a state of quiet of nervous action as to render a person or animal incapable to a great extent, if not entirely, of experiencing pain while under the action of the knife, or other instrument of operation of a surgeon, calculated to produce pain. This is our discovery, and the combining it with or applying it to any operation of surgery, for the purpose of alleviating animal suffering, as well as of enabling a surgeon to conduct his operations with little or no struggling or muscular action of the patient, and with more certainty of success, constitutes our invention. The nervous quiet and insensibility to pain produced on a person is generally of short duration; the degree or extent of it, or time which it lasts, depends on the amount of ethereal vapor received into the system, and the constitutional character of the person to whom it is administered. Practice will soon acquaint an experienced surgeon with the amount of etheric vapor to be administered to persons, for the accomplishment of the surgical operation or operations required in their respective cases. For the extraction of a tooth the individual may be thrown into the insensible state, generally speaking, only a few minutes. For the removal of a tumour, or the performance of the amputation of a limb, it is necessary to regulate the amount of vapor inhaled, to the time required to complete the operation. Various modes may be adopted for conveying the etheric vapor into the lungs. A very simple one is to saturate a piece of cloth or sponge with sulphuric ether, and place it to the nostrils or mouth so that the person may inhale the vapors. A more effective

one is to take a glass or other proper vessel like a common bottle or flask. Place in it a sponge saturated with sulphuric ether. Let there be a hole made through the side of the vessel, for the admission of atmospheric air (which (*hole*) may or may not be provided with a valve opening downwards, or so as to allow air to pass into the vessel,) a valve on the outside of the neck opening upwards, and another valve in the neck and between that last mentioned and the body of the vessel or flask, which latter valve in the neck should open towards the mouth of the neck or bottle. The extremity of the neck is to be placed in the mouth of the patient, and his nostrils stopped or closed in such a manner as to cause him to inhale air through the bottle, and to exhale it through the neck and out of the valve on the outside of the neck. The air thus breathed, by passing in contact with the sponge will be charged with the etheric vapers, which will be conveyed by it into the lungs of the patient. This will soon produce the state of insensibility or nervous quiet required.

In order to render the ether agreeable to various persons, we often combine it with one or more essential oils, having pleasant perfumes. This may be effected by mixing the ether and essential oil, and washing the mixture in water. The impurities will subside, and the ether, impregnated with the perfume, will rise to the top of the water. We sometimes combine a narcotic preparation, such as opium or morphine, with the ether. This may be done by any ways known to chemists, by which a combination of etheric and narcotic vapors may be produced.

After a person has been put into the state of insensibility, as above described, a surgical operation may be performed upon him, without, so far as repeated experiments have proved, giving to him any apparent or real pain, or so little in comparison to that produced by the usual process of conducting surgical operations, as to be scarcely noticeable. There is very nearly if not entire absence of all pain. Immediately or soon after the operation is completed, a restoration of the patient to his usual feelings takes place, without, generally speaking, his having been sensible of the performance of the operation.

From the experiments we have made we are led to prefer the vapors of sulphuric ether to those of muriatic or other kinds of ether, but any such may be employed which will properly produce the state of insensibility without any injurious consequences to the patient.

We are fully aware that narcotics have been administered to patients undergoing surgical operations, and, as we believe, always by introducing them into the *stomach*. This we consider in no respect to embody our invention, as we operate through the *lungs and air passages*, and the effects produced upon the patient are entirely or so far different as to render the one of very little, while the other is of immense, utility. The consequences of the change are very considerable, as an immense amount of human or animal suffering can be prevented by the application of our discovery.

What we claim as our invention is the herein before described

means by which we are enabled to effect the above highly important improvement in surgical operations, viz., by combining therewith the application of ether or the vapor thereof substantially as above specified.

In testimony whereof, we have hereunto set out signatures this twenth-seventh day of October, A. D. 1846 CHARLES T. JACKSON,

Witnesses, WM. T. G. MORTON.

R. H. Eddy,

W. H. Leighton. [*Bost. Med. and Su r. Journ.*

On the employment of Ether in Surgical Operations. By the Editor of the London Medical Gazette.

The burst of enthusiasm which has ushered in the use of ether as a means of rendering persons unconscious of pain, while under surgical operations, having had time to extend itself through the length and breadth of our land, it becomes us, as journalists, to consider calmly whether our present experience of the influence of this new agent is really confirmatory of, or in opposition to, the glowing paragraphs almost daily found in our newspapers:—whether, in fact, the introduction of this medicine, for the purpose alluded to, has been productive of the unmixed good that the public have been led to believe,—and whether, in estimating its value, medical men have followed that discreet, philosophical, and respectable course which might have been expected from the members of a liberal profession.

It is a well known fact, that intoxication, whether produced by ordinary potations, by opium, by Indian hemp, or indeed by many other substances, does, when it is carried far enough, produce in the system a state marked by a more or less complete unconsciousness of pain; and this, with respect to opium and hemp, whether taken into the stomach, or when introduced into the lungs by smoking. The same, or a similar condition, is induced by the use of ether. It is true we have not been accustomed to introduce ether into the stomach for the purpose of inducing intoxication, previous to the performance of surgical operations; but we are by no means convinced that its effects would not be equally remarkable were it so applied, or that the plan might not be accompanied with less risk, than when it is introduced into the system through the agency of the lungs. While the stomach is modified for the reception of various substances, the lungs are organised for the introduction of atmospheric air, and it is constantly observed that the air-passages become impatient under the presence of the ether vapour, as well as under many other gaseous fluids.

Under ether intoxication the most severe surgical operations may often be performed and the patient, when the influence is dissipated, will assure those around him that he has experienced no pain, and that he has been probably under the influence of a pleasant dream. It is, however, certain that under the knife, patients thus intoxicated will struggle, or even scream, violently; and yet, when all is passed, they will tell you that they have been totally unconscious of the pro-

ceeding which has given rise to it. It is also the fact, that many signs of exhaustion may be apparent afterwards, and they may be quite as decided as those which are observed after ordinary operations, and indeed much more than might be expected to occur after unimportant operations. How these circumstances are to be explained it is not easy to determine; some persons suggest that it is owing to a strong preoccupation induced in the brain by the intoxication,—others maintain that the power of perception is for the time extinguished, as you stupify the brain and make it insensible to pain by an overwhelming dose of opium; and by them the convulsive movements are referred to a reflex action. Whether any of these explanations be correct is doubtful.

The fact, however, still remains—certain indications of pain are apparent, although the patient, when the influence has ceased, is not aware of anything which could have given rise to them; and certainly there is often as much appearance of exhaustion as might be expected from the apparent amount of suffering.

These facts being admitted, it may next be asked—Can we determine in advance what dose of the vapour the patient may require to produce the wished-for effect, as we can determine what dose may be required by certain remedies to produce a given effect?—(as we know, in fact, that in nineteen cases out of twenty a scruple of jalap will purge—a scruple of ipecacuanha will vomit.) Certainly not; for if we take two similar kinds of apparatus, with a like quantity of similar ether in each, of the same temperature, and let it be inhaled by two patients with the same rapidity,—in one the desired effects may be obtained within five minutes; in the other it may be not for a quarter of an hour; and there is no certain sign by which we can be assured that the patient has had enough. The state of the pupil and the state of the pulse are extremely variable, and therefore not to be relied on; probably the best test is the change in the breathing. Then it also happens with ether, as with opium, or, indeed, any species of intoxicating substance, that the form which the intoxication may assume cannot with any certainty be predicated. One man, under opium smoking, will become stupidly insensible—almost comatose; another will become furious and "run a muck," as is often observed in the East. Under ether, probably one case in twenty will be accompanied by this sort of excitement.

Then, as to the operation itself, it is not always desirable that the patient should be unconscious: it is sometimes well to know how much suffering is experienced—whether nervous cords are unnecessarily interfered with, and so on. No surgeon, while opening a hernial sac, or making a section of the prostate, could regard without apprehension the chance of some convulsive movement. When a patient's senses are entire, these things do not often happen; but during intoxication he may bring his jaws together while a cutting instrument is in his mouth.

Supposing it to be admitted, however, that the administration of ether under ordinary circumstances is a certain means of rendering

a patient insensible during operation (which is by no means the case,) and supposing the dose could be exactly adapted to every case, and supposing the effects to be uniform, do we know of any evil consequences which have up to this time resulted from its use?—and are they of so serious a character as to make a prudent man hesitate in recommending his patient to become subject to its influence?

Great excitement of the nervous system, sometimes approaching to apoplexy,—an asthmatic condition of the respiratory organs,—spitting of blood,—syncope,—are among the results which have been observed; but these are by no means the worst. In many instances —already we are aware of six or seven—death has followed quickly upon operations so performed. It may be that in some of these cases death would have resulted even had the ether not been inhaled; but, as far as we have been informed, several of the deaths have occurred under circumstances which are not observed under ordinary operations. It is to be regretted that the same alacrity is not shewn in furnishing journals or newspapers with these fatal cases as with the "dexterous operations." We are sorry to say it, but we believe it to be the fact, that none of these cases, with the exception of that reported by Mr. Nunn, have been recorded in this country.

How different is the conduct of M. Jobert, the distinguished surgeon of St. Louis, at Paris. At the sitting of the Academy of Medicine, held February 16th, he stated that in two cases death after operation had occurred in his wards, and that the inhalation practised in both instances did not appear to him to have been altogether unconnected with the fatal issue.

Why there should be this want of common honesty we cannot conceive. There are few persons who do not concede the necessity of fairly trying the agent; and, if that be admitted, its failure cannot attach any reproach to the operator unless there have been a want of proper caution in the administration. So far as the effects have been at present observed, they do not justify us in condemning the agent, but they show us the necessity of grave circumspection in its employment.

There is another matter connected with this subject which presses more heavily upon us: and it is under a strong sense of duty that we raise our voice against it. We allude to the system by which this discovery has been introduced to the public. It is so inconsistent with that self-respect which should actuate the conduct of every member of a liberal profession, that we could not be silent without a failure of the duty which we owe to those who pursue the higher path. To extend invitations to be present at operations to every layman of his acquaintance is surely not the way in which an enlightened surgeon would seek to advance the cause of science. Under this new agent, the phenomena, where females are concerned, are often so peculiar, that the opportunities of being present are sought for by some persons as means of gratifying a prurient curiosity: and what is not less to be deplored, is the fact that what is observed has the effect of influencing incorrectly the judgment of people whose infirmities may render

them the subjects of operation, but cannot tend to the advancement of science.

The experiments have been in many instances so made, that the public are no longer spectators only, but judges of the propriety of the administration of the remedy ;—and patients now direct that ether shall or shall not be employed, instead of allowing the practitioner freedom of action.

It is with much pain that we have observed the headlong pursuit of any opportunity for performing surgical operations,—sometimes even without urgent necessity,—because they are likely to come before the public. One day it is the section of tendons, another the administration of ether :—and we are confident that nothing tends more to shake public confidence in professional men, than the restlessness with which each new phantom is followed and abandoned.

But what is still less worthy is the system of puffing in the public papers to which the inhalation of ether has given rise. The presence of a newspaper reporter, however able in his own field, is not necessary in the operating theatre of an hospital, and he can scarcely be a competent judge of the merits of a surgical operation. A surgeon would scarcely say that an amputation was performed in a masterly manner, when the soft parts, left to cover the bone, were insufficient for the purpose, by an inch and a half, the bone being left protruding, and yet such an operation has so fascinated a reporter that he could scarcely set any bounds to his glowing description of its excellence. Is it ignorance, or something corrupt, which affords the readiest explanation of these things ?

It will not do for us to wrap ourselves up in our mantles, and to inveigh against Holloway and others, if quasi respectable members of our own profession, and even Hospital Surgeons, await only a convenient opportunity to advertise themselves in terms as gross and as objectionable as those of Culverwell, Goss, and others.—*Lond. Med. Gaz.*

On Etherization. Since we last noticed this subject, although the inhalation of ether has been practised to a great extent, much of the enthusiasm which at first prevailed respecting it has been dissipated. The occasional unpleasant, and in a few instances even fatal effects which have resulted from its use, have caused a salutary check to the extravagant anticipations which were formed with regard to it. Further experience only can enable us to form correct notions of those circumstances which may render its application warrantable. In the meantime it is our intention to give a short summary of the novel facts which have been elicited in connexion with etherization during the past month.

Apparatus and mode of inhalation.—The forms of apparatus invented for inhaling ether are already endless. The desideratum at present is to render them cheap and portable, without destroying their efficiency. The apparatus employed by Professor Simpson com-

pletely answers these purposes. (See our Report of the Med. Chir. Society, March 3d.) Experience has shown that the inhalation should be so conducted as to produce its full effect as soon as possible, in order to prevent or shorten the period of excitement. With this view a large volume of vapour should be inhaled from the first, the individual should not be disturbed, or the inhalation interrupted, and the ether should be pure.

It has been proved experimentally by Mr. Young, cutler, Edinburgh, on his owa person, before the Society of Arts, that so far from there being any danger of explosion during the inhalation, that flame applied to the mouth, and breathed upon, is immediately extinguished.

Physiological effects.—Numerous experiments have been performed on the lower animals by MM. Flourens, Serres, Gruby, Longet, Magendie and others. The same phenomena have for the most part been observed in them as in man. Stupification by ether constitutes a convenient mode of depriving animals of sensation, for experiments on the excito-motory system. If pushed too far, however, even this is affected, and death is occasioned. Different degrees of insensibility may be produced, aud an action upon the brain proper alone, or combined with this upon the medulla oblongata, and spinal chord, be occasioned according to the extent to which inhalation is carried. According to M. Flourens, ether acts on the nervous centres in the following order :—First, on the cerebral hemisphere; second, on the cerebellum; third, one the spinal chord; lastly on the medulla oblongata, destroying successively intelligence, regular movements, sensibility, and life. Dr. Buchanan of Glasgow, having pointed out that the blood surcharged with ether is sent directly to the heart and brain, explains the evanescence of its action by comparatively pure blood from the lower regions of the body, succeeding it as soon as the inhalation is stopped. (Paper read to the Philosophical Society of Glasgow.) The peculiar sensations experienced by individuals vary considerably in different cases.

Applications.—The removal of pain during surgical operations still constiutes the chief object of inhalation. Even this application of it, however, has caused perhaps less sensation than that of destroying the pains of child-birth, without interfering with the progress of labour. This fact, first ascertained by Professor Simpson, of Edinburgh, has been confirmed by Professor Paul Dubois of Paris, and subsequently by several others.

We are informed by Dr. Simpson that latterly he has ascertained two important points with regard to the use of ether in midwifery. First, its action may be kept up for hours. In one case he had a patient placed for four, and in another for five hours and a half, under its influence before the child was born. When the patients awoke, about thirty or forty minutes after delivery, they were quite unconscious of the birth of their infants, and could scarcely at first be persuaded of the happy result. Both labours had been previously exceedingly tedious. One of the patients had child's head arrested at

the brim, and after being above thirty-six hours in labour, was delivered by Dr. S. with the long forceps. Second; the fœtus in utero seems not to be deleteriously affected by even such prolonged etherization of the mother. In these two cases the action of the fœtal heart was carefully watched by Dr. S. with the stethoscope, and did not vary above ten or fifteen beats during the whole time of the etherization. Both children were born alive and well.

Ethereal inhalation has also been tried in several cases of facial neuralgia, inducing insensibility to the painful paroxysms, and sleep which could not otherwise be procured.

Another application has been made by M. Baudens to determine true from feigned diseases in the army. In one case, where curvature of the back was simulated, the deformity disappeared during the insensibility caused by ether, and the individual was led to confess the imposture. In another case, a suspected ankylosis of the hip joint was in the same way proved to be a reality.

Inconvenient effects have frequently resulted from the inhalation. Many of these will be found related by Professor Syme and Dr. Roberts, in our report of the meetings of the Medico-Chirurgical Society of Edinburgh. Great excitement, cough with expectoration of pus, hemoptysis, and convulsions, during the inhalation, have been witnessed by ourselves. In some cases, erotic feelings, and even nymphomania, have been occasioned in females, in others hysterical symptoms, or those of depression or intense headache, which have continued several days. In our last number we noticed the occasional occurrence of alarming sinking, which required vigorous measures to restore the individual. In some cases, the individuals have been thrown into such a state of agitation as to render the performance of the operation impossible.

Fatal effects have become multiplied. In our last number, one fatal case was noticed, occurring in the Edinburgh Royal Infirmary. We are informed that there are just now two other cases in which the ether was given, dying of secondary purulent deposits in the same institution. Is this result the effect of ether? An answer in the affirmative cannot be decidedly given, but, as we previously stated, all such cases require to be put on record. M. Jobert has brought forward two cases in which he considered death to be partly dependent on the ether. M. Roux has given another of tetanus, in which the patient never rallied from the stupefaction, and where death was decidedly accelerated by it. Mr. Nunn, of Colchester, has recorded a case of lithotomy, which sunk without the patient having rallied from the operation; and Dr. Maclagan has mentioned another, occurring in London after amputation of the thigh.

We observe in the Times, an account of an inquest at Grantham, in the County of Lincoln, in a case where an osteo-sarcomatous tumour was removed by Mr. Robbs, surgeon, under the influence of ether. The patient never rallied from the operation, which was in no way severe or prolonged, and the jury found "That the deceased, Ann Parkinson, died from the effects of the vapour of ether, inhaled

by her for the purpose of alleviating pain during the removal of a tumour from her left thigh, and not from the effect of the operation, or any other cause." In the correctness of this verdict the surgeon himself, Mr. Robbs, concurred.

Morbid Appearances.—The morbid appearances which have been found after death, caused by ether in animals, are similar to those observed in asphyxia, namely, fluidity of the blood, its collection in the right side of the heart and large veins, and engorgement of the internal viscera. In the fatal case of the Royal Infirmary there was found double pneumonia, bronchitis, and secondary purulent deposits in the joints. In the case of Mr. Nunn, cerebral congestion, lungs engorged posteriorly, and uniform fluidity of the blood. In the case at Grantham there was no great congestion, but the blood was fluid throughout. The observations of Amussat and Lassaign have shown that in every case the blood loses its power of coagulation, although with the exception of the presence of a minute dose of ether, its chemical principles are unchanged.

Claims to the discovery.—The merit of discovering the application of etherization to removing pain in surgical operations, has been lately claimed by Dr. Wells, of America. He states that he was led to the discovery by observing that individuals, when in a state of great excitement, as during battle, or intoxication, never felt the pain of local injuries. He consequently caused the patient to inhale ether, and nitrous oxide gas in several cases, and found that they were thus insensible to the pain of surgical operations. He was led to prefer the nitrous oxide gas for this purpose, from its causing less injurious effects than ether. He communicated his discovery to Drs. Morton and Jackson, who then received it with incredulity. He shortly after left America for Europe, and was much surprised on arriving at Paris to find that those gentlemen had propagated his ideas without any allusion to him.

Since writing the above we have been informed that Professor Syme has abandoned the use of ether in his surgical clinic.—*Monthly Journal of Medical Science.*

Fatal Effects of Ether Vapour in a case of Lithotomy. By Roger Nunn, Esq., Surgeon to the Colchester and Essex Hospital.—At a time when the attention of both the medical profession and the public is being called to the influence of the ethereal vapour as an agent in deadening pain during surgical operations, you may probably consider the accompanying case of sufficient interest to be admitted into your columns.

On Friday, the 12th inst., I operated upon Thomas Herbert, ætat. 52, the subject of stone in the bladder, in the presence of most of the medical gentlemen of the town and neighbourhood. The ether was exhibited by my colleague, Dr. Williams, who considered the patient to be sufficiently under its influence after having inhaled it seven or eight minutes, at the end of which time I commenced the operation. There was neither difficulty nor loss of time in cutting into the blad-

der; but, having done so, some little delay occurred in grasping the stone, which was small, very flat, and lying in the posterior part of the bladder; the delay was also increased by the extremely relaxed state of the bladder itself which seemed to fall in folds on the forceps, and to cover the stone. The time occupied from the commencement of the operation to the period when the man was unbound, was ten minutes, during which the ether was administered at intervals. The patient was placed fully under its influence, and the breathing first became heavy, and ultimately stertorous. He recovered, however, from its effects after a short time, and continued in a quiet passive state, but without decided reaction, for 24 hours. At this period he had a chill, which lasted for nearly twenty minutes. Mr. Taylor (the house-surgeon,) immediately gave him two ounces of brandy, with an equal quantity of water, after which the patient remained in a dozing state till 8 o'clock, P. M., when the house-surgeon considered it necessary to send for me, as a state of complete prostration or collapse had ensued. I ordered small quantities of brandy and water (equal parts,) with arrow-root, at intervals, wrapped him in hot blankets, placed hot bottles in the bed, &c. This treatment was kept up till 9 o'clock the following morning, when ammonia was given alternately with the before-mentioned stimulus. The patient seemed incoherent from 8 o'clock, P. M., of Saturday till 9 A. M., of the following day, when symptoms of slight reaction appeared. At a consultation of the medical staff, which was held at the time, it was determined that the same treatment should be continued, (modified according to circumstances,) and that, in addition, a stimulating injection should be administered. (The effects of the injection were to increase slightly the frequency of the heart's pulsation, but without exciting his nervous energies.) From this time he gradually sank, and died at 5 o'clock, P. M., being sensible to the last.

I should here mention that the small vessels which are necessarily divided in making the first incision showed much inclination to bleed, owing, I imagine, to their want of contractile power. I therefore, to prevent any unnecessary hæmorrhage, secured them immediately after the patient was put to bed, so that he did not lose much blood.

Postmortem (67 *hours after death.*)—Membranous congestion of the brain, but no effusion; brain firm; lungs permeable throughout, anteriorly ex-sanguineous, posteriorly engorged; heart flaccid, of a natural size, and nearly empty; the left kidney pale; the right, slightly congested. The bladder and the adjoining parts presented the usual aspect after an operation.

I would mention that the blood throughout the whole vascular system was in a perfectly fluid state.

It is not my intention or inclination to attribute the loss of my patient wholly to the influence of the ether which was administered in this case, nor hastily to decry its use under all circumstances connected with surgical operations; but still I feel called upon to bring before the notice of my medical brethren the effects which resulted from its exhibition in this instance, that the profession may judge,

from the recital of an unsuccessful case, how far it may be considered safe to employ ether generally as a means of preventing the pain otherwise inseparable from the physical lesion. The suffused eye, livid lips, and stertorous breathing, accompanied, first, by convulsive struggles, and next by a sudden cessation of all motion, are often indicative of the effects of the vapour; and these were not altogether absent in the present instance: still, I felt myself justified in employing it, from the published accounts of many successful cases, and the sanction of my colleagues and numerous friends around me. In prosecuting the operation, there was nothing peculiar to attract my attention, or to lead me to consider the patient's physical condition different from that of those on whom I had before operated, until I had reached the bladder, when I can but attribute the difficulty in seizing the stone to the apparently collapsed state of that viscus which had fallen in folds over the calculus, and so prevented its being grasped by the forceps. I must not, however, omit to mention the fact that the patient expressed no signs of suffering during the operation. Thus far, therefore, it may be said the ether fulfilled its intended office; but I think another question is involved, viz. whether the artificial means thus employed may not produce very serious depressing effects on the nervous system, depriving a patient of that reactive power so necessary to the reparative process. Has not a patient, after the administration of ether, a double shock to overcome —that produced by the vapour superadded to that of the operation itself? Does not the history of the postmortem examination bear out the suspicion of the depressing influence of this inhalation?—*positively*, from the still fluid state of the blood (although the body was not opened for 67 hours after death,) and from the flaccid state of the heart; *negatively*, from the fact that the inspection detected no indications of violence done to the parts that could explain the rapid dissolution which ensued, and that *there was no evidence of nature having made the slightest effort towards local reparation.* Pain is doubtless our great safeguard under ordinary circumstances; but for it we should be hourly falling into danger; and I am inclined to believe that pain should be considered as a healthy indication, and an *essential* concomitant with surgical operations, and that it is amply compensated by the effects it produces on the system as the natural incentive to reparative action.

I trust that the publication of this unsuccessful case may lead to the publication of many others which have occurred, so that the profession may not be led away by the erroneous supposition that the prevention of pain is so vital a desideratum in operative surgery.

*** Operators have hitherto fallen into the error of looking only to one side of the question. The profession is indebted to Mr. Nunn for placing in so strong a light the danger which may occasionally arise from the use of ether vapour. We have hitherto had a run of successful cases: it is now time that our correspondents should pause in their records of successful cases, and look to the possible danger.

London Med. Gaz.

On the removal of Stains in Linen made by Nitrate of Silver. By W. B. Herapath, M. B. Lond., Bristol.—Medical practitioners in the habit of using the nitrate of silver extensively, as a remedial agent, must have frequently heard loud complaints of their patients' linen having been indelibly stained and spoilt, by some accident having occurred during its use; and in many cases, patients have refused to employ these preparations, in consequence of the extensive destruction of linen which they occasion. I have therefore very little doubt that the following observations will prove most acceptable to my brother practitioners:—

These dark stains consist of very finely divided metallic silver in intimate union with the fibres of the cloth. Had they been oxide of silver, any diluted acid would have dissolved them; but nitric acid alone produces any effect upon them, which of course cannot be employed on account of its powerfully destructive effects upon the linen fabric. Iodine immediately converts them into iodide of silver, which is instantly dissolved by a solution of hypo-sulphate of soda, and the cloth remains as white as when issued from the bleaching house, and as firm and durable as ever.

The best mode of employing the substance is to strain the spotted linen over a basin of hot water, and then to let fall upon each spot, previously moistened with water, a few drops of tincture of iodine, and instantly to pour a sufficient solution of the hypo-sulphate of soda to dissolve the iodide produced, and then immerse the spot in the water beneath, to wash out and cleanse the tissue, at once, from the stain and chemical reagents employed. The tincture of iodine of London Pharmacopœia strength is the one I employ; and one drachm of crystallized hypo-sulphate of soda, dissolved in two ounces of water, will make an excellent bleaching liquid.

A patient may thus be very readily taught the manner of removing an unpleasantness frequently attending the use of a most valuable remedy.—*London Lancet.*

The Philosopher's Stone the subject of a Patent in the Fourteenth Century.—In a work lately published on the law of patents, it is stated "that in the time of Edward III. some alchymists persuaded the King that a philosopher's stone might be made, that the King granted a commission to two friars and two aldermen to inquire if it was feasible, who certified that it was, and that the King granted to the two aldermen a patent of privilege that they and their assigns should have the sole making of the philosopher's stone." This grant is believed to be the first, or at least the first patent privilege granted for any invention of which mention is made either in law books or chronicles, and is curious as showing the state of science in the fourteenth century.—*London Med. Gaz.*

THE

MEDICAL EXAMINER,

AND

RECORD OF MEDICAL SCIENCE.

NEW SERIES.—No. XXX.—JUNE, 1847.

ORIGINAL COMMUNICATIONS.

Sulphuric Ether in Surgical Operations. By JAMES BRYAN, M. D., Lecturer on Surgery; formerly Professor of Surgery and Medical Jurisprudence, in Castleton Academy of Medicine, Vermont.

To the Editor of the Medical Examiner.

Mrs. A——, a married lady, of delicate health and constitution, who had suffered for a long time from neuralgia and facial inflammations, caused by decayed teeth, consented to try the ether as administered by Mr. H. S. Porter, dentist, and one of my pupils. The inhalation was made from the instrument called the "*Inhalus*" of the patentees. About half an ounce of the ether was poured into the sponge, and the lady, seated in an arm chair, inhaled the vapour about five minutes, when she became languid and sleepy, and desired to be 'let alone.' The instruments were applied, and three teeth (two incisors and one cuspid) were dexterously extracted; the patient only raising her hand slowly, and drawing a deep sigh on the extraction of each tooth. The immediate effects of the ether continued about three or four minutes, when she expressed herself surprised that the teeth had been taken out.

Miss B——, on the 2d of April, inhaled the vapour from the same apparatus in my parlour, and after continuing the process about eight minutes, appeared partially insensible, and had a dens sapientiæ of the upper jaw extracted by the same operation, and said that she experienced no pain.

A few days after this, Mrs. A., the first patient, took the ether

again, inhaling it about five minutes before the soporific effects were produced, when Mr. P. extracted two of the largest molars of the upper jaw, and the remaining *cuspid* of the same jaw. The *lethean* effect had passed off before the last tooth was extracted, and she said that she experienced considerable pain during the extraction, but much less than if no ether had been administered. A slight head ache, which may in part be attributed to previous illness, continued for four or five hours.

On the 7th of April, Miss C——, from Massachusetts, in the presence of Dr. Winslow, myself, and members of the family in which she resided, submitted to the operation for extirpation of the left mamma, while under the influence of the ether. The inhalation, under the direction of Mr. Porter, continued about eight minutes, when I made two elliptical incisions, including the nipple, and took out the tumour in the usual manner. The disease being cancerous, a portion of the healthy part was included. I proceeded, with the assistance of Dr. Winslow, to take up the arteries, when the patient inquired if there was any more cutting to be performed, seemingly unconscious that the tumour was removed. She declared, however, that she was conscious of each incision that was made, but felt *no power* to *resist*. The larger vessels were taken up, and the wound left partly dressed, that time might be allowed for reaction fairly to take place. Rather more than half an hour afterwards reaction did take place, and the vessels not taken up bled profusely, making it necessary to remove the dressings and carefully take up the most minute arteries. After this, the wound was properly dressed, and did very well, healing up almost entirely by the first intention.

Miss C. says, since she has reflected upon it, that she is sure the greatest part of the pain was avoided—very little, in fact, having been suffered. She was desirous of taking the ether while the arteries were being taken up, but I would not consent, being convinced that one effect of the ether was to diminish the action of the arterial system.

I send you these cases, sir, without comment. These—with one other case in which the patient insisted that the tooth had not been taken out, although the operation was slow and difficult—are all I have seen, and from these I am *rather* disposed to try *it again in certain cases*.

Case of Poisening, from swallowing Percussion Caps.—By T. W. Foster, M. D., of Keene, Jessamin County, Ky.

Not long since, I was called in great haste to attend an infant, æt. 14 months. Upon entering the room, I was informed by the parents that they had observed their child, about two hours pre-

vious to my visit, playing with a box of percussion caps, and they supposed she had swallowed some of them, as signs of acute suffering were exhibited soon after.

The little patient appeared to be sinking very fast. The eyes had a hollow, glazed appearance; there was great heat in the epigastric region, and coldness of the extremities; there had been eight or nine discharges from the bowels in an hour, and her general aspect denoted approaching collapse. Before my arrival free emesis had been produced by some domestic remedy, yet I continued the vomiting by administering ipecac. and large draughts of warm water, (of which the patient greedily drank,) with the hope of discharging at least a portion of the offending matters. The discharges became so debilitating, however, that I threw up an injection of eight drops of laudanum, suspended in starch mucilage, and immediately afterward gave a large dose of calcined magnesia. An alkaline purgative was selected for the purpose of neutralizing any acid which might be found in the stomach or intestines, and thus prevent any chemical change in the copper. In the course of an hour, the child became perfectly composed, and fell into a pleasant slumber, though it had previously suffered excuciating pain, attended with spasms. Dr. Spilman, the family physician, now took charge of the case, and applied counter-irritation to the abdomen. On the next day four caps were discovered in the fœcal matter, which were found to be devoid of their fulminating powder. The child is now enjoying very good health.

BIBLIOGRAPHICAL NOTICES.

Medical Botany; or Descriptions of the more important Plants used in Medicine, with their History, Properties, and Mode of Administration. By R. EGLESFELD GRIFFITH, M. D., Member of the American Philosophical Society; of the Academy of Natural Sciences of Philadelphia, &c., &c., [with a motto,] with upwards of three hundred illustrations. 8vo. pp. 704. Philadelphia, 1847.

Illustrations of Medical Botany: consisting of coloured figures of the plants affording the important articles of the Materia Medica, and descriptive letterpress. By JOSEPH CARSON, M. D., Professor of Materia Medica in the Philadelphia College of Pharmacy; Member of the American Philosophical Society; of the Academy of Natural Sciences of Philadelphia; Fellow of the College of Physicians, &c. The drawings on stone by J. H. Colen. Vol. 1. Fol. pp. 28. Twenty Illustrations. Philadelphia, 1847.

What a change has occurred in the mode in which scientific subjects are taught in the schools at the present day from that which was common twenty or thirty years ago! Dry descriptions unaided by graphic illustrations are now uncommon, and the teaching, in any department of science, which does not address the eye as well as the ear, is properly deemed imperfect. Every thing is now rendered as demonstrable and demonstrative as possible, and it may be safely said, that the medical student has now much greater facilities for obtaining a due insight into an intricate branch of science than he had formerly. Nor ought this to be forgotten when an estimate is made of the present condition of medical education as compared with the past.

Of botanical works treating of general and medical botany, and illustrated by wood-cuts or copperplates, we have had numerous examples. Some of the oldest "*herbals*" are of this character, and in modern times excellent treatises have appeared, both in Europe and in this country, on medical botany more

especially. Those of Woodville of England, and of Roques of France, were well adapted to the objects had in view by their authors; whilst those of Barton and Bigelow, on the vegetable materia medica of the United States, were admirable, and are still worthy of all commendation; but they are no longer attainable; and moreover, many excellent and energetic articles from the vegetable kingdom have been added to the lists of the Materia Medica since these works were issued.

It is well, then, that individuals who—all must admit—are fully competent to the task and the occasion—*Arcades ambo*—should have directed their talents and acquirements to the botanical history of those articles of the Materia Medica, which, here and elsewhere, are properly esteemed amongst the most valuable agents employed by the practitioner.

We may, by the way, express our surprise, that amongst the various and often conflicting sentiments to which the Medical Convention recently held in this city gave occasion, nothing—so far as we know—was said by authority as to the importance, to the professional student, of his attaining some knowledge of botany or natural history, either during his office attendance or at an after period. The published sentiments of some of the reformers must have, indeed, been materially modified and mollified, when we find no remarks from them as to the necessity for the candidate for graduation to pass through a curriculum of study equal or approaching to that required in many of the European schools; and which he could not pass through unless such a curriculum were determined upon, and attention to it rigorously enforced.

We confess we should have greatly preferred to see some recommendation to the practitioner, that he should teach, or cause to be taught, to his office student the elements, at least, of botanical and zoological knowledge, rather than that it should have been urged upon him to take care that a candidate for his office instruction should know as much Latin as would enable him to translate or write a prescription. We cannot help regarding it as a solemn farce to pronounce to the world, that the writing of a prescription, in the mode in which it is done universally in this country, implies any knowledge of Latin whatever, seeing that all who understand *technical* terms and the proper *symbols* can accomplish this without difficulty. Let us take any extempo-

raneous prescription by way of elucidation. We write the following at random:

℞. Infus. Gentian. comp. f.℥vj.
Tinct. Gentian. comp. f.℥iij.
Syrup Aurant. f.℥ij.
M.

Let him take a fourth part four times a day.

To write such a prescription, we say, requires no knowledge of Latin. The technical titles of the officinal preparations are given in the United States Pharmacopœia; and the abridgement of those titles assuredly demands no Latin. The symbols, too, are understood with equal facility, and with equal nescience of that learned language. It would be somewhat otherwise were the *directions* to be written in Latin. Then, instead of the English, given above, we should have

"Sumat partem quartam quater in die,"

and for this a certain acquaintance with the Latin would be necessary. This, however, is never done in this country, and consequently, we repeat, the writing of a prescription in our ordinary mode requires rather a knowledge of technical terms than of Latin; and hence every apothecary's boy soon learns all that is required of the professional student by the Convention, whether his attention at school have been directed to the humanities or not. We think that respectable body ought to have required—as we stated in a former number—"that the youth intended for the medical profession, should have the intellectual and moral training that befits the well-educated gentleman," and all will be prepared to admit, that the Greek and Latin languages form a necessary part of such training. Were it universal or common we should not meet with such a quotation as the following in a recent number of a respectable medical journal:—*Romæ scribo et Ære romano*"—we give it literally—which "meaneth when literally interpreted"—"I write at Rome and in Roman *brass*," whereas the author wished to say, that he wrote in the "Roman air or atmosphere," *(aere.)* But we must not dwell upon this subject, especially as we do not yet possess a published report of the proceedings of the Convention, and may therefore unintentionally do it injustice.

As regards the utility of natural history and botany, and the

importance of their forming a part of medical education "*prior to attendance on lectures,*" we borrow and adopt the following observations from a recent author:* "It is not"—he says—"in its relation to materia medica, that the study of natural history ought to be esteemed most important. As physiology investigates the nature and functions of all living bodies, it is, necessarily, intimately associated with natural history. It is, indeed, indebted to this branch of physics more perhaps than to any other. A comparative view of the various gradations amongst organized beings has taught us to appreciate the nature of the several functions that characterize vitality; and has demonstrated, that in proportion as the structure is more complete the functions are more numerous and perfect. Repeated observations, and multiplied experiments on various tribes of animated nature, have elucidated many doubtful and obscure phenomena in the economy of man; and a continuation of this method of research promises to place physiology on the firm basis of rational experience; and to enable us to reason—where only we can reason with safety—by a deduction from facts. The more numerous these facts, and the more satisfactory their arrangement, the more extensive and the more secure will be the foundation they afford for physiological conclusions.

"Botany might seem to be of much more service to the physician than zoology, inasmuch as so many of our remedies are derived from the vegetable kingdom. At one time, indeed, nothing but 'galenicals,' as they were termed, were employed, and these were mainly of vegetable origin. We can imagine the importance of an acquaintance with the botanical characters of different vegetables, should destiny cast the physician on some unknown shore, where the sole sustenance may have to be derived from the vegetable kingdom, and where hundreds, perhaps, may have to be guided to a knowledge of the innoxious and the noxious by his decision. It might happen, too, that the physician may be so situated as to be unable to procure those indigenous productions, which are usually selected so carefully by the professed herbalist as to render it less necessary that they should be culled by him. In such cases his botanical knowledge would be called into play. Still, these are rare emergencies, on

*Dr. Dunglison, Medical Student, p. 165.

account of the facility with which articles of merchandise can be transported everywhere; and, as the preparation of medicinal productions constitutes a distinct calling, the physician is generally in the habit of depending upon the apothecary—who gets them from the herbalist—for his supplies. It is of more practical importance that the physician should know the genuineness of every article that comes to him—a knowledge which observation—rather than botany—gives him. Still, like every branch of the tree of knowledge, physiology and the natural sciences in general have a tendency to expand the mind, and to react upon trains of thought, with which they do not, at first, appear to be intimately associated. In but few of the medical schools of this continent is botany or natural history made a distinct branch of medical education. The period of the year at which medical instruction is chiefly conveyed is unfavorable to botanical exercises; but the seasons of Spring, Summer and Autumn, are well adapted,—especially the first, when all nature smiles; and

> "From the meadow to the wither'd hill,
> Led by the breeze, the vivid verdure runs,
> And swells and deepens; and the spicy groves
> Put forth their buds, unfolding by degrees,
> Till the whole leafy forest stands displayed,
> In full luxuriance, to the sighing gales."

"At these seasons, the student cannot do better—should his opportunities, whilst in the office of his preceptor, permit—than make himself acquainted practically with botany—both by study and observation in the fields; and should he be unable to become a good zoologist,—so far as regards a knowledge of the generic and specific characters of animals,—he can, at least, acquire a knowledge of the 'philosophy of zoology'—one of the most interesting of the applications of natural science, and one that throws important light on the functions of the human body. It embraces, indeed, the physiology of animals, every topic of which elucidates that of man."

The work of Dr. Griffith contains a large amount of instructive matter, and is, in all respects, such a production as might have been expected from one so well acquainted with his subject, and who was for many years a popular teacher on materia medica and other departments of medical science in Virginia and Mary-

land, and, as a matter of consequence, well aware of the kind of information that ought to be imparted on a congenerous subject. The objects which he was desirous of accomplishing in the work before us, are thus expressed in the preface:

"The work now offered to the profession is intended as a companion to the more practical treatises, and also to convey such information on the systematic classification, characters and history of medical plants as has been necessarily omitted in the publications alluded to. In the execution of the plan, the author has experienced some difficulty in determining the limits of the work. To notice all the plants which have at different times been employed in medicine, or have had remedial properties assigned to them, would have been impossible in the compass of a single volume, and merely to describe those recognized in the Pharmacopœia would have militated against the object of the work. It was thought that the end would be best attained by dwelling at some length on the most important articles of the Vegetable Materia Medica, or on such as are involved in some obscurity as regards their botanical characters and history, and by noticing the others in a brief manner. In doing this, they have been arranged according to the natural orders, and it will be seen that the technical descriptions have been drawn up in strict accordance with the present improved state of botanical knowledge. These descriptions are selected from the best authorities; in some cases without alterations, but in others altered, corrected or condensed, so as to present as great a uniformity of phraseology as possible. As the work is, from its very nature, a compilation, the only originality that can be claimed by the author is in the selection and arrangement of his materials." p. viii.

And is not this the very "originality" that is above all things desirable in such an undertaking; and is not an author deserving of infinitely more honour, who faithfully depicts and interprets science *as it is* than if he *strained* after originality,—with the necessary result of describing science *as it is not*,—and attempted to introduce novelties, which, after myriads—we may say—of excellent observers had bent their minds to the task, must have been noticed by them if the novelty were truth? The "ear is pained, the heart is sick" with the notoriety—fame, perhaps—attained by a naturalist for having first depicted a new species or variety, for which he perhaps deserved but little more credit than he who discriminates amongst a crowd, by his *sensible* pro-

perties, one whom he has never before seen, and describes him so well, that he can be readily recognized when seen again by others. Yet upon such *perceptivity*—to employ the language of the phrenologist—the naturalist prides himself; and hosts of his brethren—proverbially *genus irritabile*—are ready to pounce upon him, and to contest the honour or deny the truth of his "*discovery.*" The man, who, in the nineteenth century, in a science like that of medicine, collates well and analyses accurately the observations of himself and others, and reduces the *indigesta moles*—the chaos—to something like order, is eminently worthy of honour and of a niche in the temple of fame: it is not, indeed, the best observer of facts who is necessarily the best philosopher—in other words, the best interpreter of the *laws* of facts or phenomena: he serves, however, as the pioneer, and the man of science follows to cultivate the newly discovered region.

To make his work more extensively useful, Dr. Griffith has—wisely, we think—prefixed a brief introduction on the anatomy, physiology and chemistry of plants, with a copious glossary of botanical terms—most valuable to the tyro—and a conspectus of the natural order of plants that are of medicinal utility.

To exhibit the mode in which he treats his subject we shall extract at random.

"I. TINCTORIA, *Linn.*—Leaflets 4—5 pairs, ovate, somewhat pubescent beneath; racemes shorter than the leaves; legumes terete, arcuated, deflexed.

Linn., *Sp. Pl.* 1061; Lam., *Dict.* iii. 245; Lindley, *Fl. Med.* 242; De Candolle, *Prod.* ii. 224.

Common Name.—Indigo Plant.

Foreign Name.—Indigotier, *Fr.*

Description.—A shrub about two feet in height, with spreading, sub-flexuous branches, which are angulose and appressed-puberulous near their extremities. Leaves pinnate. Leaflets 4—5 pair, with an odd one, petiolated, elliptic, acute at base, mucronate at tip, with an appressed pubescence beneath. Stipules small and subulate. Racemes axillary, not as long as the leaves. Flowers pedicellate, with minute subulate bracts. Calyx 5-toothed, the two upper wider apart than the others. Flowers of a greenish colour, marked with vermilion red. Standard ovate, mucronate, minutely ciliate, and pubescent externally. Wings shorter than the keel, which is concave, greenish, minutely, ciliated. Legume more than an inch in length, arcuated, terete, pubescent, containing ten seeds.

Several species of Indigofera are cultivated, but the *I. tinctoria* is that grown in India, and very extensively in South America, the Gua-

timala plant, *I. disperma*, being considered by De Candolle as a variety of it. Besides this, the *I. anil*, *I. caroliniana*, and *I. argentia*, are also used, the two latter in the United States. The *I. tinctoria* abounds most in colouring principles, and is therefore the one generally selected for cultivation.

Indigo is a rich blue substance, light and friable, tasteless, almost devoid of smell, of a smooth fracture, insoluble in water or alcohol, but dissolved by sulphuric or nitric acid. It consists of indigotin, or indigo blue, indigo brown, indigo red, and a gelatinous substance. It is procured in three different modes; by fermentation, which was the most general plan, by scalding, and by the dry process; which latter is becoming much used in India, and is said to afford the best product, whilst it is not so injurious to the health of those engaged in the manufacture. (See *Encyclop. Amer.*, Art. *Indigo.*) In whatever way Indigo is procured, a certain degree of fermentation appears necessary, as it does not appear to exist in the leaves, and is therefore rather a product than an educt.

The mode of preparing it, and of applying it to the purposes of dyeing, seem to have been known in India from the earliest ages, and it is noticed by Dioscorides and Pliny, though the term *Indicum* was also applied to other colouring substances. Its use was likewise known to the Mexicans and other American natives, long anterior to the conquest. As early as the fifteenth century the Venetians were in the habit of receiving it from India, by the way of Egypt; but it was not generally employed in Europe until about the middle of the sixteenth century, when it was brought from the East Indies by the Dutch. When it was thus introduced, there was a great prejudice against it, and it was considered to be a kind of stone; it was prohibited in England by Elizabeth, and in Saxony by the Elector, who speaks of it in his edict as a corrosive substance, and food fit only for the devil.

The best Indigo is of a deep-blue colour, inclining to violet, of a smooth grain, and bright and sparkling when broken. It should break easily, swim in water, and burn freely, leaving but little residue.

Medical Uses, &c.—A decoction of the root, used as a lotion, effectually destroys vermin, and is much used for that purpose in Jamaica. The juice of the young branches, mixed with honey, is recommended as an application in the aphthous sore mouth in children, and Indigo sprinkled over foul ulcers is said to cleanse them (Macfayden, *Flor. Jam.* i. 251.) The leaves are supposed to have virtue in hepatitis, given in the form of powder mixed with honey, and a decoction of the root is reckoned as alexipharmic. (Ainslie, *Mat. Ind.* i. 179.)

Indigo itself has been employed for a long time. The Romans ascribed extraordinary virtues to it; 'rigores et impetus sedat et siccat ulcera,' (*Plin.* lib. xxxv. c. vi.) It was employed at one time as an astringent, in immoderate discharges of the lochia, and for curing a prolapsus of the uterus or rectum. (James, *Pharm. Univer.*, 345.) Of late years it has attained some celebrity in the treatment of spasmodic diseases, especially epilepsy, in which it is stated to have been very successful in numerous cases in Germany. The trials made with it in England

and this country, have not been attended with the same good results (Dunglison, *New Rem.*, 361.) To produce any effect the doses must be as large as the stomach can bear, beginning with a few grains and increasing. The best form of exhibition is in an electuary of one part of Indigo to two of syrup. According to Roth (*Pereira*, ii. 610) it produces the following effects. 'Shortly after taking it the patient experiences a sense of constriction at the fauces, and an impression of a metallic taste on the tongue. This is followed by nausea, and frequently by vomiting. In some persons the vomiting is so violent as to prevent any further use of the remedy. When it has subsided, a diarrhœa, often accompanied with cardialgia, ensues; the stools are frequent, liquid, and of a blue colour. Dyspepsia and vertigo sometimes occur. The urine becomes of a dark-brown or violet colour. After its use for some time, spasmodic twitching of the muscles sometimes takes place.'

This article, however, appears to be possessed of very little power, as most persons can take it in very large doses; two ounces having been administered daily for a length of time without producing any very manifest effect, except a derangement of the digestive apparatus."

The wood-cuts are generally well executed; and we can recommend the work strongly both to the student and practitioner.—A few errors we notice—many of them doubtless typographical—such as *Madur Culotropis* for Madar or Mudar Calotropis; *Gieger* for Geiger; Paulus *Æginetus* for Paulus Ægineta. These can be corrected in a second edition, which we hope to herald before a long period has elapsed. The German synonymy, too, requires "overhauling;" in such cases for example as *Neiswurz* for Niesewurz; *Gartenmohu* for Gartenmohn; *Meerettig* for Meerrettig; *Pomeranzin* for Pomeranzen; *Wiesser zimmet* for Weisser Zimmt; *Geftsumach* for Giftsumach; *Unchte Quassie* for Quassie, [we know not what the *unchte* means,] &c. &c. Nor do we think the best or distinctive synonymes have been selected: for example, under SINAPIS NIGRA we have as the German synonym *Schwarzer Senfe*, [Schwarzer Senf] which means "black mustard;" whilst under SINAPIS ALBA, "white mustard," we have *Senfsamen* or "mustard seed," in place of *weisser Senf. Bitter wurzel*—"bitter root"—is doubtless a synonym of Gentiana lutea; but the one most used is *Enzian wurzel*, which is omitted. These, however, are comparatively small matters; but we wish to see so good a book purged of all errors. To one who is not a German scholar, or who does not

desire to become one, the German synonymy is of course of little or no moment.

The work of Dr. Carson differs from that of Dr. Griffith essentially in this;—that whilst the text is subordinate, in the former, to the "Illustrations,"—in the latter, the xylographic representations are subordinate to the text. This difference between the works is sufficiently shown by a comparison of the title pages.

After stating in his "Introduction" the necessity for a lecturer, who is desirous of being successful, "to have at his command the means of presenting to his hearers the visible objects, or representations of them, about which he discourses," Dr. Carson adds:

"As regards the department of Materia Medica, the instruction usually given is accompanied by the exhibition of delineations of Medical Plants. This will answer the ends of the teacher, and greatly aid the listener for the time being; but amidst the multiplicity of objects, and from the brief period allowed for inspection, the impression made upon the mind is soon enfeebled, and in most cases altogether fades, if close and more protracted observation be not afforded. It is then desirable to possess the means of reviving impressions received, of studying the subject at leisure, and of rendering the plants familiar. But not only to students will the publication be serviceable; it will materially aid numerous teachers, whose facilities of access to the works from which the necessary materials for illustration can be derived, are few and imperfect, and in this respect a double end will be accomplished." * * * "As the design of the work," he concludes, "is simply to present the botanical history of the materia medica, and not a complete account of it, with the exception of indicating the modes of operation peculiar to each substance, all therapeutical and pharmaceutical details appertaining to it have been omitted. The works especially written with the view of unfolding them are full, and easy of access." p. 6.

It is proper to remark, that after acknowledging the sources whence information has been derived, Dr. Carson adds:—

"From the collection of specimens, which during the last ten years he has been enabled to make, and which have been employed by him in the Courses at the Philadelphia College of Pharmacy, many of the representations are entirely new, and where they are not strictly so, corrections have been made from this source, which render them more valuable than those which have been used as copy." p. 6.

The following account of a well known indigenous article of the materia medica will exhibit the Author's mode of managing the text:

POLYGALA SENEGA.—*Linnæus.*
Seneka Snake Root.

SEX. SYST.—Diadelphia Octandria.

GEN. CHAR.—*Sepals* five, persistent, the alæ large and petaloid. *Petals* three, their claws all united with the staminiferous tube, the lower one (*carina*) keel-shaped, the two additional ones abortive. *Stamens* united into a tube at the base, which is cleft in front; *anthers* opening by a pore. *Ovary* two-celled; *ovules*, solitary, pendulous from the apex of the cell. *Capsule* two-locular, loculicidal, compressed. *Seeds* pendulous from the apex of the cells, pubescent with a carunculate arillus at the hilum; *albumen* abundant, fleshy. *Shrubs* or herbaceous plants. *Flowers* arranged in terminal or axillary racemes. (Wright and Arnott in Lindley's *Flora Medica.*)

SPECIF. CHAR.—*Root* perennial, large, firm, and ligneous, with coarse branches. *Stem* nine to fifteen inches high, mostly several from the same root; simple, herbaceous, rather flaccid, and oblique, terete below, slightly angular above; minutely roughish-pubescent, with numerous small, ovate, sessile scales, like leaves, at or near the base. *Leaves* one to two, or three inches long, and one-third of an inch to near an inch wide, smoothish, slightly serulate or scabrous on the margin, more or less acuminately tapering at apex, and narrowed at base to a short petiole. *Spike* one to two inches long, dense, terminal, somewhat nodding, or flaccid; *pedicels* very short, each with an oblong lance-shaped bract at base, and two minute lateral bracts. *Flowers* greenish-white. Capsule obcordate, compressed, orbicular, retuse. *Seeds* large, pyriform, hairy.

This plant is an inhabitant of the United States; found in Pennsylvania, but more abundantly in the Southern and Western States. It flowers from June to August, and ripens its seeds as it flowers.

The root, which is the medicinal portion, is of various sizes, sometimes as thick as large quills, and at others minute and delicate. The head is disposed in the old roots to be enlarged, rough, and irregular, from the separation of the stems annually. It is branched, fibrous, contorted, and twisted, and marked by a sharp line or ridge, which extends the entire length. It is composed of a cortical substance and a ligneous cord. The colour varies from a dark-brown to a yellow. The dried root resembles the fresh, but is broken with a short fracture. It has a peculiar, disagreeable smell, and the taste is at first sweetish but afterward acrid and disagreeable.

In this root have been detected two new acids by Quevenne, *Polygalic acid* and *Virgineic acid*, as also tannic acid. The first is capable of union with bases; it is the principle called by Gehlen *Senegin*; the second is volatile and oily, and may be the volatile oil detected by Dulong. The acrid taste is due to the polygalic acid.

The medical properties of Senega are determined by the dose. In large quantity it is a nauseant and emetic; in smaller, diaphoretic, expectorant, and diuretic. It cannot be regarded as poisonous, although much inconvenience may be induced by an overdose. It is used in pulmonary affections, principally as a stimulant expectorant. It has also been proposed as an emmenagogue.

The introduction to the notice of the medical profession is due to Dr. Tennent, of Virginia, who became acquainted with it from learning that the Indians used it as a remedy in the bites of venomous snakes; hence the name of *Snake-root*. This remedial power, however, has not been sustained. It has been given in powder, but as it imparts its virtues to water, some of the preparations are preferred, as the decoction or syrup. Cox's Hive Syrup owes a part of its properties to this root.

This is only the first part of the work. The Prospectus informs us, that it is to be completed in five numbers, of twenty plates each,—the price of each number to subscribers being five dollars, payable on delivery.

The plates are beautifully executed on stone, and, in the case of plants with which we are familiar, are accurately coloured and life-like. We may infer, therefore, that such is the case with those with which we are unacquainted. Can further recommendations be needed for an undertaking so creditable to all concerned, and which, whilst it instructs the scientific inquirer, must be an object of interest and even of *virtu* to all?

Sydenham Society's Works. *On the Injuries and Diseases of Bones. Being Selections from the collected edition of the Clinical Lectures of Baron Dupuytren, Surgeon-in-chief to the Hôtel-Dieu at Paris. Translated and edited* by F. Le Gros Clark, Assistant Surgeon to, and Lecturer on Descriptive and Surgical Anatomy at St. Thomas's Hospital. 8vo. pp. 459. London: 1847.

This is the second work issued by the Sydenham Society of London to its members of the year 1846—7. The first, containing Hewson's contributions to scientific medicine, was noticed by us in a late number.

At the request of the Council of the Society, Mr. Clark undertook to translate and edit a volume, which should comprise all the papers on the Injuries and Diseases of the Bones contained in the *Leçons Orales* of the most distinguished French surgeon of modern

times; and the following introductory remarks will explain the "scope, objects and arrangement of the work."

"In the original," says Mr. Clark, "the articles in question are scattered through the first two volumes of the 'Leçons Orales,' without any regard to appropriate collocation. Moreover, much confusion is the consequence of frequent and sudden changes from the first to the third person;—the Professor being made sometimes to speak in the former, at others in the latter; or, again, his editors speak for him, or quote his opinions. In the translation it has been thought desirable to impart an uniform style to the work; as well as to render the French into corresponding idiomatic English, as far as was compatible with a strict adherence to the meaning of the author. To carry out this intention, a paraphrastic translation has been, in a measure, rendered essential. Compression, also, has been resorted to in details generally; and many of the cases have been abridged, especially in those parts of them which have no immediate reference to the subjects under consideration. In short, the object has been, to render the present treatise more acceptable to the English reader, by disencumbering the original of needless repetition and redundancy,—a process of condensation to which one cannot but believe that the author himself would have subjected the work, had he superintended its publication in a complete form; although it is not difficult to appreciate the motives of his able editors, in retaining and enlarging upon all that fell from their esteemed preceptor." p. vi.

A biographical sketch of the author is prefixed to the volume, which has the rare merit, that whilst it depicts in glowing terms the elevated intellectual qualities of the subject of the biography, it does not conceal his admitted failings. It is a picture of the man as he was, not as the biographer would wish him to have been.

The third issue of the Sydenham Society for the year will be the works of the illustrious Harvey.

Lectures on subjects connected with Clinical Medicine; comprising Diseases of the Heart. By P. M. Latham, M. D., Fellow of the Royal College of Physicians, Physician Extraordinary to the Queen, and late Physician to St. Bartholomew's Hospital. 8vo. pp. 365. Ed. Barrington and Geo. D. Haswell. Philadelphia, 1847.

In his capacity of physician to one of the largest Hospitals in London, during a number of years, the author of these lectures enjoyed unusual opportunities for watching the phenomena and

progress of disease, and the influence of medical treatment, and few men have evinced greater zeal to avail themselves of such advantages, or have been endowed with higher powers for profiting by them. Unlike many of our most admired investigators of the present day, he does not present us with a mass of heterogeneous matter in the shape of facts, without the least seeming object or combination; but resemblances are noticed, concurrences pointed out, and deductions, natural and obvious, are drawn, so that the reader is made to comprehend the philosophy as well as the facts of the science.

The object of the lecturer has been to present to the student a concise account of the diseases of the heart, as met with at the bed side, and not that extended investigation into all that relates to the subject, which is found in the more comprehensive work of Dr. Hope. It differs, too, from the latter work in strictly avoiding all controversy. "Mine," he remarks, "is a limited purpose. It is to regard the diseases of the heart only in one point of view, i. e., as they appear in the living man. But this one point of view includes the several objects of their clinical diagnosis, and their clinical history, and their medical treatment." Rightly conceiving that "the clinical diagnosis of diseases of the heart, owes all the higher degrees of certainty to which it has been carried in our own times, entirely to auscultatory signs," "the natural sounds and impulses and resonances" of the organ are accurately described, in order that the degree and extent of variations from these may be understood as evidences of unsoundness. The whole subject, of diseases of the heart, including angina pectoris and pericardiac affections, is treated in a brief but masterly manner.

A treatise on the diseases of the eye. By W. Lawrence, F.R.S., Surgeon Extraordinary to the Queen, etc. etc. etc. *A new edition. Edited, with numerous additions, and one hundred and seventy-six illustrations*, by Isaac Hays, M. D., Surgeon to Wills' Hospital; Physician to the Philadelphia Orphan Asylum; Member of the American Philosophical Society; Fellow of the College of Physicians of Philadelphia, etc. etc. 8vo. pp. 859. Lea and Blanchard, Philadelphia, 1847.

The treatise on diseases of the eye by Mr. Lawrence has been

long before the profession, and is too extensively, and, we may add, too favourably known to require lengthened notice or particular commendation. It commences as, in our opinion, all such treatises designed for the use of students and general practitioners ought to commence, with a full account of the anatomy and physiology of the eye-ball. After describing the various parts in the normal condition, and their functions in health, the lesions both of structure and function are more readily discovered and better appreciated. Such an introductory course is indispensable to the student, and to the country practitioner, who has not access to extensive treatises on anatomy and physiology, scarcely less so.

The author's descriptions of the various diseases of the eye, lachrymal organs, &c., are remarkably full and explicit, and from his large experience and thorough reading, there can be little doubt, that the treatment pointed out in the several affections is in accordance with the present advanced state of our knowledge in this important branch of surgical science.

"Among the additions which have been made," says the Editor, "may be noticed,—the descriptions of several affections not treated of in the original—an account of the catoptric examination of the eye, and of its employment as a means of diagnosis—one hundred and seventy-six illustrations, some of them from original drawings,—and a very full index."

The editor has had much experience in the treatment of this class of diseases, in private practice as well as in public institutions, and his contributions therefore constitute a valuable part of the publication. We cannot but regret, however, the evident haste in which these contributions have been written. Had he allowed himself more time in the preparation of his notes and commentaries, he would doubtless have corrected and rendered more perspicuous many passages which are now obscure; and, we hope, would have more generally followed the nomenclature adopted in the U. S. Pharmacopœia. He might have written strych*nine* for strych*nia*; but certainly not carbonate of potassi*um* for carbonate of potass*a*; hydriodate of potassi*um* for hydriodate of potass*a*,—*iodide of potassium;* &c. We should have been pleased, also, to have discovered more frequent reference to contemporaneous American writers on diseases of the eye, and a less exclusive

reliance on the pages of a single American Medical Journal (Am. Jour. of Med. Science) for cases and opinions. Still, we can most heartily commend this edition of Lawrence on the Eye, as a rich store-house of ophthalmic knowledge.

THE MEDICAL EXAMINER.

PHILADELPHIA, JUNE, 1847.

NATIONAL MEDICAL CONVENTION.

In our *Record* department of the present number of the Examiner, will be found the Minutes of the Proceedings of the Medical Convention, which assembled in this city on the 5th ultimo. To bring the account within the limits of a single number, we have been obliged to omit the names of the delegates, and to defer to future numbers the reports made by the several committees appointed at the previous Convention.

Among the resolutions reported by the committees was one recommending to the medical schools of the country to extend the lecture term to six months, and to demand of the medical student higher preliminary attainments. On another page we have indulged in some strictures on the proceedings in reference to the latter point, expressive of our surprise at the very slender, we might say, derogatory amount of literary knowledge, suggested as sufficient by gentlemen who have been so anxious to *elevate* the professional standard. In regard to an extension of the lecture term by the colleges, much may be said for and against the scheme; but one thing is most certain, that it cannot be accomplished without a pretty general concurrence among the colleges themselves, and present indications do not seem to warrant the belief that such will be the case. We infer this from past experience, but more particularly from the following remarks contained in the Boston Medical and Surgical Journal of the 19th ult., the editor of which was a member of the Convention, and is withal

well acquainted with every thing pertaining to the New England Medical Schools, but not being in any manner connected with them, can have no bias other than that resulting from a more intimate acquaintance with the difficulties of the subject than is generally possessed, from having himself in former years been engaged in teaching

"One measure of the Convention, which proposes that the lecture terms shall be extended to six months in all the medical colleges in the Union, will be hard to digest, although carried triumphantly through the Convention. The fact is, these institutions are independent bodies, with chartered rights which cannot be wrenched from them. They may be induced by the force of public opinion to vary very considerably the present system of lecturing, but cannot be driven or persuaded to continue the annual series of lectures any longer than the judgment of the faculties determines. Students could not be kept together so long without some new and stronger motive than has yet been presented to them. Both professors and pupils, we fear, would loathe the sight of each other before the term was brought to a close. In the fickle climate of New England it is a question whether either party could endure the fatigue of a six months session, without suffering in health. Again, at least one-third, if not more, of the students entering upon the study of medicine, could not procure the means of defraying their personal expenses, six months in succession. But as the ground was thoroughly surveyed by the advocates and opponents of the scheme, we shall neither go over it again, nor present a category of new arguments in opposition to the expressed will of a majority, but frankly state what we believe to be true, viz., that New England will not conform to the proposed measure, and that the institution which first announces the long term system will droop and die.

The meeting of the Convention in Philadelphia was delightful, and our recollections are of a very pleasant kind. At no period in the history of the republic, have so many physicians been together from its different portions. Good must result from the interviews which gentlemen had with each other; and the warm friendships that were commenced on that agreeable occasion, will be promotive of kindness and fraternal feeling. The public doings, also, of the Convention will exert a beneficial influence, although the progress of reform must necessarily be slow and perhaps tedious."

In the concluding remarks of our Boston brother, every member of the profession in Philadelphia will heartily concur. Whatever may result from the proceedings of the Convention,—in the number and respectability of those who composed it, and the dignity which prevailed thoughout all its sittings, there was much to be proud of. We believe, that all its members from a distance were impressed with the brotherly feeling manifested towards them, as well as towards each

other, by the physicians of Philadelphia; and we speak advisedly, when we say that the latter were delighted with the opportunity afforded them of making the acquaintance of their distinguished brethren thoughout our great and glorious country.

SHIP FEVER.

The vast number of emigrants arriving at some of our sea-ports, particularly New York, has become a source of considerable anxiety to the inhabitants. Not merely from the rapid accumulation of persons beyond the immediate means of employment, which constitutes a serious tax upon the people, but from the destitution of the poor creatures, and the crowded state of the vessels in which they are brought, many of them pass at once into the public institutions, affected with what is called ship fever; and this in some instances has extended to the inmates, and even the officers of the institutions into which they are received.

For weeks past we have had accounts of this state of things in the city of New York, and now, by the public prints, we learn that the same is occurring in the city of Baltimore. By a letter dated Baltimore, May 21, 1847, published in the United States Gazette, the writer says: "What is termed the ship fever is now prevailing to a considerable extent among the emigrants recently arrived at our port. In several instances it has proved fatal, and is said to be contagious. Dr. Lawrence, one of the health officers, was taken with it, and is now quite ill."

OBITUARY.

Died, in the city of New York, on the 29th of April last, in the sixtieth year of his age, John Revere, M. D., Professor of the Theory and Practice of Medicine in the Medical Department of the University of the City of New York.

Dr. Revere was born in the city of Boston, and was the son of Paul Revere, a distinguished patriot of the Revolution. After completing his education at Cambridge, Mass., he entered as student of Medicine in the office of Dr. James Jackson, of Boston, and after the requisite period of study proceeded to Europe, where he spent several years in the pursuit of knowledge, and graduated at the University of Edinburgh, under the distinguished Professors Home, Hope, Hamilton, Monro, &c. Having thus honourably finished his education, he returned to his native city and commenced the practice of his profes-

sion, but was soon compelled to relinquish it, and fly to a more genial clime, in consequence of frequent inflammations of the lungs and threatened phthisis. A trip to Richmond, Va., where he spent some time, so far improved his health, that he was induced again to attempt the practice of his profession, and with that view he settled in Baltimore, where he remained several years, and then proceeded again to Europe on business. Whilst in Europe, he was elected to the chair of the Theory and Practice of Medicine in the Jefferson Medical College of Philadelphia, the duties of which he continued to discharge with great fidelity and ability for several years, when, in the year 1841, he was induced to resign, in order to accept a chair in the University of New York.

We had the pleasure of being associated with him in the Jefferson Medical College, and a more zealous instructer in the important branch which he taught could not be met with. Although his health was then somewhat delicate, he rarely failed to be at his post; and on all occasions of importance participated in the deliberations of his colleagues,—ever anxious to advance the great interests of the profession to which he belonged, and of the institution with which he was more immediately connected.

DIED,—In Richmond, Virginia, on the —— ultimo, AUGUSTUS S. WARNER, M.D., Professor of Surgery in the Hampden Sidney College. Professor Warner, we are informed, was an intrepid and successful surgeon, and an able and eloquent lecturer.

DIED,—Suddenly in this city, on the 9th ultimo, in the 51st year of his age, GEORGE MCCLELLAN, M. D., formerly Professor of Surgery in the Medical Department of Pennsylvania College, and previously in Jefferson Medical College. Dr. McClellan was eminent as a surgeon, and particularly distinguished as a bold and ingenious operator, and an ardent and eloquent lecturer. The College of Physicians, of which he was a member, was convened on the occasion of his death, when the following proceedings were had:

"Whereas, By the sudden demise of Doctor GEORGE MCCLELLAN, in the period of maturity of intellect, and in the enjoyment of extensive professional usefulness and reputation, this College, of which the deceased was a Fellow, and the community at large, have sustained a loss which will be long felt, as it is now deeply deplored. Therefore,

Resolved, That the College will attend the funeral of its deceased Fellow GEORGE MCCLELLAN, as a mark of their respect for his talents and his worth.

Resolved, That the College tender to the family of the deceased their sincere sympathy and condolence for the very great and irreparable bereavement they have sustained in the death of a most kind and affectionate husband and parent.

Resolved, That Dr. Samuel G. Morton be requested to prepare a biographical notice of our deceased Fellow, to be read before this College.

Resolved, That a copy of these resolutions be transmitted to the family of the deceased, and that they be published in the daily papers, and in the Professional Journals of the city.

Resolved, That the College adjourn to meet at nine o'clock to-morrow morning, to proceed in a body to attend the funeral of their deceased Fellow."

RECORD OF MEDICAL SCIENCE.

PROCEEDINGS OF THE NATIONAL MEDICAL CONVENTION,

Held in the City of Philadelphia, in May, 1847.

PHILADELPHIA, *May 5th*, 1847.

The delegates to the National Medical Convention assembled in the Hall of the "Academy of Natural Sciences," at 10 o'clock, A.M.

Dr. Isaac Hays, Chairman of the Committee of Arrangements from the Philadelphia delegation, opened the proceedings with a few remarks, welcoming the delegates to the city, and expressing on behalf of his delegation the gratification it afforded them to receive the members of the Convention as their guests. He then proposed a temporary organization, and nominated Dr. Jonathan Knight, of Conn., as Chairman. This nomination was unanimously confirmed.

Drs. Arnold, of Georgia, and Stillé, of Pennsylvania, were then appointed Secretaries.

On motion of Dr. Hays, and by appointment of the Chairman, Drs. Arnold, of Ga.; Blatchford of N. Y.; Thompson, of Del.; Haxall, of Va.; and Bishop, of Conn., were constituted a committee to examine and verify the credentials of the Delegates to the Convention. The meeting then took a recess for half an hour.

On re-assembling, it was moved by Dr. J. M. Smith, of N. Y., and seconded by Dr. F. C. Stewart, of N. Y., that a committee of one, from each State represented, should be appointed to nominate permanent officers for the Convention.

The following gentlemen (whose credentials had already been verified) were appointed by the Chairman:—

1.	Dr. Holmes,	*Mass.*	13.	Dr. Moultrie,	*S. C.*
2.	" Twitchell,	*N. H.*	14.	" Mitchell,	*Ky.*
3.	" Dunn,	*R. I.*	15.	" Garvin,	*Ga.*
4.	" E. Ives,	*Conn.*	16.	" Buchanan,	*Tenn.*
5.	" Stearns,	*N. Y.*	17.	" Pierce,	*Mich.*
6.	" Hall,	*Vt.*	18.	" Frye,	*Ill.*
7.	" Cole,	*N. J.*	19.	" Carpenter,	*La.*
8.	" Norris,	*Pa.*	20.	" Keirn,	*Miss.*
9.	" G. W. Baker,	*Del.*	21.	" Bullitt,	*Mo.*
10.	" Gibson,	*Md.*	22.	" Shipman,	*Ind.*
11.	" Welford,	*Va.*	23.	" Butterfield,	*Ohio.*
12.	" Lindsley,	*D. C.*			

On motion, the Committee were instructed to nominate *four* Vice Presidents, and *three* Secretaries.

The Committee for the Verification of Credentials then presented the following report, which, on motion, was accepted, and the committee continued.

The Committee beg leave to report that they have examined the Credentials of the delegates from the several sections of the Union, and herewith submit a list of them.

Owing to the number of vouchers required to be examined, and the necessarily hurried manner in which the committee have been obliged to perform their duty, some omissions may have been made. If so, they request that gentlemen, so omitted, may at once hand in their names to the Secretaries.

R. D. Arnold,
T. W. Blatchford,
Jas. W. Thomson,
R. W. Haxall,
E. H. Bishop.

DELEGATES.

[To save space we are compelled to omit the names of the delegates.—*Ed.*]

New Hampshire—New Hampshire Medical Society, 5. Dartmouth Medical College, 1.

Vermont—Vermont Medical College, 1. Vermont Medical Society, 4. Faculty of Castleton Medical College, 1.

Massachusetts—Massachusetts Medical Society, 8. Middlesex District Medical Society, 3. Faculty of Medicine of Harvard University, 1. Berkshire Medical Institute, 1.

Rhode Island—R. I. Medical Society, 4.

Connecticut—Medical Institution of Yale College, 2. Connecticut Medical Society, 8. New Haven Medical Association, 1.

New York—College of Physicians and Surgeons in the city of New York, 3. New York State Medical Society, 19. Medical Faculty University of the City of New York, 4. Rensselaer Co. Medical Society, 2. Troy Medical Association, 1. Erie Co. Medical Association, 1. Cortland Medical Society, 1. New York Medical and Surgical Society, 5. Medical Department of the University of Buffalo, 1. Med. Fac. of Geneva College, 1. Albany Medical Col-

lege, 4. New York Pathological Society, 4. New York Hospital, 2 Medical Society of the City and County of New York, 14. New York Academy of Medicine, 15.

New Jersey—Medical Society of New Jersey, 10. District Medical Society of Burlington, 3.

Pennsylvania—College of Physicians of Philadelphia, 16. University of Pennsylvania, 3. Philadelphia Medical Society, 12. Jefferson Medical College, 3. Pennsylvania College, 3. Franklin Medical College, 3. Philadelphia College of Medicine, 2. Medical Institute of Philadelphia, 1. Northern Medical Association of Philadelphia, 12. Lancaster City and County Medical Society, 7. Med. Soc. of Montgomery Co., 3.

Delaware—Medical Society of the State of Delaware, 9. Med. Association of the City of Wilmington, 4.

Maryland—Medical and Chirurgical Faculty of Maryland, 6. Association of Med. Faculty of Frederick City, 1. Washington University of Baltimore, 2.

District of Columbia—Medical Society of the District of Columbia, 3. Medical Department of the Columbian College, 3.

Virginia—Medical Convention of Virginia, 9. Medical Society of Virginia, 16. Petersburgh Medical Faculty, 5. Medical Soc. of Fredericksburg, 1.

South Carolina—Medical Society of South Carolina, 3. Medical College of the State of South Carolina, 1.

Georgia—Georgia Medical Society, 2. Medical College of Georgia, 2.

Mississippi—Mississippi State Medical Society, 3.

Louisiana—Medical Department of University of Louisiana, 3.

Missouri—Medical Department of the St. Louis University, 2. St. Louis Association of Physicians, 1.

Illinois—Rush Medical College, 1.

Indiana—Indiana Medical College, 4.

Michigan—State Medical Society, 1.

Ohio—Medico-Chirurgical Society of Cincinnati, 1. Ohio Medical Convention, 3. Willoughby Medical College, 1.

Kentucky—Medical Department of Transylvania University, 3.

Tennessee—Medical Department of the State of Tennessee, 1.

The Committee charged with the nomination of permanent officers for the Convention, reported through their chairman, Dr. Eli Ives, the following nominations:

President.—Dr. Jonathan Knight, Conn.

Vice Presidents.—Dr. Alexander H. Stevens, N. Y.; Dr. George B. Wood, Pa.; Dr. A. H. Buchanan, Tenn.; Dr. John Harrison, La.

Secretaries.—Dr. Richard D. Arnold, Ga.; Dr. Alfred Stillé, Pa.; Dr. F. Campbell Stewart, N. Y.

Which were unanimously confirmed.

The officers having taken their places, the Convention was declared to be duly organized, and ready for the transaction of business.

On motion of Dr. J. L. Atlee, of Lancaster, Pa., it was—

Resolved, That any medical gentlemen present from States not otherwise represented, and the members of the Medical Staff of the Army and Navy, now in the city, be invited to take seats in the Convention.

The following Resolution was introduced by Dr. Thomson, of Del.

Resolved, That any member of the last Convention, now present, not elected a Representative in this Convention, be invited to take a seat in the same, and participate in its deliberations;—which, on being put to the vote, was lost.

The following Resolution, presented by Dr. Corbin, of Va., was also lost: viz.—

Resolved, Unanimously by the National Medical Convention, that the Ex-Professors of medicine of the various Medical Schools of the U. S., and such Professors from abroad as may be in Philadelphia, be invited to take seats in this body.

Dr. Hays called for the reading of the Report of the Committee appointed by the last National Medical Convention, to prepare a plan of organization for a *National Medical Association*. Dr. Watson, Chairman of the Committee, presented a report, which, after being read, was, on motion of Dr. Watson, received and laid upon the table in order to be printed.

Dr. Griscom, of N. Y., Chairman of the Committee appointed by the last National Convention to consider the expediency and mode of urging upon the State governments the adoption of measures for a registration of Births, Marriages, and Deaths presented a Report, which was received, and laid upon the table in order to be printed.

After which, on motion, the Convention adjourned to meet at 7 o'clock, P. M.

Evening Session.

The Convention met pursuant to adjournment.

Invitations to the Convention to visit the Philadelphia House of Refuge and the Institution for the Deaf and Dumb, were read.

Dr. Haxall, Chairman of the Committee "on the requirements for the degree of M. D.," appointed by the Convention of 1846, presented a Report, which was, on motion, received, and laid upon the table to be printed.

The Committee on Credentials, reported the following additional delegates. From Medical Society of King's County, New York, 5. New York City Vaccine Institution, 2. The Medical Department of the University of the State of Missouri, 1. Massachusetts Medical Society, 1. Faculty of Physic of the University of Maryland, 3.

On motion of Dr. Reese, of N. Y., the verification of the credentials of the delegate from the N. Y. Vaccine Institution was referred to the delegates from that city, with instructions to report thereupon.

Dr. Couper, of Del., as Chairman, presented the Report of the Committee "on Preliminary Education," appointed by the Conven-

tion of 1846, which, after being read, was, on motion, received, and laid on the table to be printed.

Dr. Hays presented a portion of the Report of the Committee appointed by the Convention of 1846, to prepare a code of Medical Ethics, which (after some remarks by the Reporter in regard to the sources from which the provisions of the code were mainly derived) was read and disposed of temporarily, in the same manner as the foregoing reports.

The following Preamble and Resolution, introduced by Dr. Watts, of N. Y., was adopted:

Whereas, The credentials contain the names of delegates elected, of whom a part will not be present, therefore,

Resolved, That the "Register" of the Philadelphia Committee of Arrangement be adopted as the Register and Roll of the Convention.

Dr. Griscom moved that the Committee "on a Nomenclature of Diseases," of which he is Chairman, be authorized to print so much of the same, as it shall deem expedient for the use of the Convention. Carried.

Dr. D. Judkins, of Cincinnati, moved that when the Convention adjourns, it adjourn to meet at 9 o'clock, A. M. Several amendments fixing the hour at 10, and the length of the Session from 9 until 3 o'clock, were rejected, and then the original motion prevailed.

At the suggestion of Dr. Hays, it was—

Resolved, That no persons should have access to the floor of the Convention, except delegates furnished with the cards provided by the Philadelphia Committee of Arrangement.

After which the Convention adjourned to 9 A. M. of the following day.

May 6th. Morning Session.

The Convention reassembled at nine o'clock, A. M.

The Minutes of the first day's proceedings having been read and approved, the roll was called; after which the Committee on Credentials reported the names of the following additional delegates.

From the Centre County Medical Society (of Pennsylvania,) 1. New York Pathological Society, 1. New York City and County Medical Society, 1. From the District Medical Society of Salem county, N. J., 1. From the Alumni of Castleton Medical College, Vermont, 1.

Dr. J. H. Griscom, of New York, presented the following resolution, which was adopted:

Resolved, That a committee of five be appointed by the Chair, to consider and report to the Convention measures for defraying its expenses.

The President then appointed the following gentlemen to the Committee: Drs. J. Bell, of Philadelphia; A. March, of Albany; J. M. Smith, of New York; L. A. Smith, of New Jersey; B. R. Wellford, of Virginia.

Dr. Stewart reported that the delegates from the New York Vaccine

Institution, whose credentials had been referred to the New York City delegations, had withdrawn the same.

Dr. N. S. Davis, of Binghamton, New York, offered the following resolution, which was ordered to be laid upon the table.

Resolved, That a committee of one from each State represented in this Convention be appointed by the President, whose duty it shall be to investigate the *Indigenous Medical Botany* of our country; paying particular attention to such plants as are now, or may be hereafter during the term of their service, found to possess valuable medicinal properties, and are not already accurately described in the standard works of our country; and report the same in writing, giving not only the Botanical and Medical description of each, but also the localities where they may be found, to the next annual meeting of the American Medical Association.

A letter, addressed to the Secretary of the Convention, was now received and read; it was signed by Dr. Lewis W. Chamberlayne, in behalf of the Medical Faculty of Hampden Sydney College, at Richmond, Va., and expressed the concurrence of the Faculty in the objects that brought the Convention together, and a regret that the delegate appointed to represent that body, was prevented by illness from attending.

An invitation was received from the Rev. Jno. A. Vaughan, Principal of the "Pennsylvania Institution for the Instruction of the Blind," for the members of the Convention to visit that Institution.

On motion of Dr. R. S. Kissam of N. Y., this, and all other invitations extended to the Convention, were ordered to be acknowledged and accepted by the Secretaries.

Dr. J. Bell, Chairman of the Committee appointed by the Convention of 1846, to prepare a code of Medical Ethics, read the introduction to the report presented yesterday, which was, on motion, ordered to be printed.

The report of the Committee appointed by the last Convention, to consider Dr. Bartles' Resolution, in regard to the union of teaching and licensing, was now called for. Dr. McNaughton, of Albany, Chairman of the Committee, presented and read a minority report. The majority report was presented by Dr. Isaac Parrish of Philadelphia.

On motion of Dr. Reese, of N. Y., both reports were received and ordered to be printed.

Dr. A. B. Shipman, of N. Y., presented the following which was adopted:

Resolved, That Dr. Thomas Spencer, of Geneva, N. Y., accidentally with us on a tour for the restoration of his health, be invited to sit with us as a member of this Association; to participate in the debates but not to vote.

Dr. J. H. Griscom, of N. Y., Chairman of the Committee appointed to prepare a "Nomenclature of Diseases," presented and read the report of his committee; which was received and ordered to be printed.

The following order was proposed by Dr. J. V. C. Smith, of

Boston, and, on motion of Dr. Watson, laid upon the table for the present.

Ordered, That a committee be appointed by the chair to select a place for the National Medical Convention to hold a session in 1848.

Dr. Couper, of Delaware, moved that the report of the Committee on Preliminary Education, be now taken up. This motion prevailed, and the report having been again read, the resolutions accompanying it, were declared to be under consideration.

Several amendments to the first resolution having been proposed and lost, the question was taken upon the adoption of the resolution: and it was adopted.

The second Resolution was adopted after substituting the word "pursue" in place of "complete."

The third Resolution having been read, Dr. Cabell, of Va., offered an amendment, which was adopted, but subsequently reconsidered and withdrawn, and the resolution passed without amendment.

On motion, the Report of the Committee was adopted and ordered to be printed, together with the resolutions, as part of the proceedings of the Convention.

On motion of Dr. John Stearns, of New York, Professor Hare, of Philadelphia, was invited to a seat in the Convention, and to take part in the debates, but without the privilege of voting.

An invitation was received from the delegates in attendance from the city of Baltimore, for the National Association about to be formed, to hold its Session for 1848 in that city.

On motion, it was determined that when the Convention adjourns, it will adjourn to meet again at 5 o'clock, P. M.

Dr. Joel Hopkins, of Maryland, offered the following Resolution to be adopted as a rule of the Convention.

Resolved, That no gentlemen shall be permitted to speak more than twice on the same proposition, nor occupy more than fifteen minutes in speaking, without leave of the Convention.

The resolution was amended, by inserting "ten minutes" in lieu of "fifteen minutes," and then adopted.

On motion of Dr. M'Naughton, of Albany, 250 additional copies of the Report of the Committee on Preliminary Education were ordered to be printed, and the Convention adjourned.

Afternoon Session.

The Convention was called to order at the hour to which it had adjourned.

The Committee on Credentials reported the name of Dr. J. Breitenbach, as an accredited Delegate from the Lebanon County Medical Society of Pennsylvania.

Dr. J. L. Pierce, of Michigan, offered the following resolution, which was adopted.

Resolved, That the delegates to this Convention, be requested to ascertain as far as may be practicable, and report to the next annual

meeting, the number of practitioners of medicine in their respective states—designating the number who may have received a diploma from a medical college, the number who may have been licensed by a medical society, and the number who practice medicine without any authority whatever.

Dr. I. Hays, of Philadelphia, moved to take up the report of the committee, appointed under the fourth resolution of the convention of 1846. This motion prevailed, and on motion of Dr. N. S. Davis, of Binghamton, the resolutions attached to the report were ordered to be considered seriatim.

The first resolution having been read, Dr. Smith, of Newark, N. J., moved to amend by inserting "five months," in place of "six months"—the amendment was lost, and the question being taken upon the resolution, it was adopted.

The second, third, fourth, fifth, and sixth resolutions were then severally read and adopted without discussion.

The seventh resolution being under consideration, Dr. Washington L. Atlee, of Pennsylvania, offered the following as a substitute:

"That it is incumbent upon the Preceptors, to avail themselves of every opportunity to impart clinical instruction to their pupils; and upon Medical Colleges, to require candidates for graduation to show that they have attended upon Hospital practice for one session, whenever it can be accomplished."

This substitute, having been accepted by the committee, was adopted.

Resolutions were proposed by Drs. J. P. Jervey, of South Carolina, and Dr. A. H. Stevens, of New York, but were withdrawn in favour of the following additional resolution, offered by Dr. F. Campbell Stewart, of New York, and unanimously adopted,

"That it be suggested to the Faculties of the various Medical Institutions of the country, to adopt some efficient means for ascertaining that their students are actually in attendance upon their lectures."

The two remaining resolutions were then acted upon and passed; and on motion, the report and resolutions were adopted.

An invitation was received from Dr. Thomas S. Kirkbride, of the "Pennsylvania Hospital for the Insane," for the Delegates to visit the Institution under his control; and then the Convention adjourned to nine o'clock, A. M., on the following day.

May 7th. Morning Session.

The Convention re-assembled at nine o'clock, A. M.

Dr. Stevens, of New York, moved that a committee be appointed to invite Dr. John Redman Coxe to take a seat upon the floor of the Convention; which was carried.

Dr. Stearns and Ely Ives were appointed.

Dr. Blatchford, of New York, moved that Dr. Cheney Howe, of St. Louis, Mo., be invited to take a seat upon the floor of the Convention; which was carried.

The minutes of yesterday's meeting were then read.

Dr. Haxall, of Virginia, moved to reconsider so much of the min-

utes as relate to the fifth resolution accompanying the report of the committee of which he was chairman; which motion was carried.

He then moved to strike out the words "that not less than one hundred lectures be delivered by each Professor;" which was carried.

The resolution as amended was then adopted.

The minutes were then confirmed.

The committee on credentials reported the following additional accredited Delegates:

Pennsylvania.—Pennsylvania Centre Co. Medical Society, 3.

Maryland.—Lebanon Med. Co. Society, 12. Med. and Chirurg. Faculty of Maryland, 8.

Dr. Geo. B. Kerfoot, of Pennsylvania, offered the following:

Resolved, That when physicians are called upon by courts of justice to give medical evidence, or opinions in medico-legal questions; by coroners to make *post-mortem* examinations, or chemical analyses; such services shall be considered professional, and remuneration expected accordingly.

Which was laid on the table.

Dr. Sumner, of Connecticut, offered the following:

Resolved, That a committee of three be appointed to ascertain and report to the next meeting of this Association, what legal enactments exist in the several states relative to the practice of medicine; and also what societies and associations have been formed by the physicians of the different states, to advance the medical profession.

Which was laid on the table.

Dr. Bell, of Penn., made the following report.

The committee appointed for taking measures to defray the expenses of the Convention, Report,

That from inquiries made, they believe that the sum of six hundred dollars will cover all the expenses incident to the meeting of the present Convention, and they respectfully recommend that each member be invited to contribute three dollars to make up the above sum.

Signed, JOHN BELL, Chairman.

After some discussion the report was adopted.

Dr. L. P. Bush, of Delaware, offered the following, which was laid on the table.

Resolved, That the committee on expenses be requested to collect the amount indicated as necessary to defray the expenses of the Convention.

On motion of Dr. Watson, of New York, the Convention took up the report of the committee on the organization of the National Medical Association.

Dr. Naudain, of Penn., moved that it be read from the Secretary's desk.

Dr. Cock, of New York, moved to dispense with the reading.

Dr. Naudain's motion prevailed.

The report was then read by the Secretary.

Dr. Hays, of Penn. moved to adopt the resolution on page second

of the printed report, as far as the words "and that" on the 12th line, which was carried.

The Convention then proceeded to the consideration, seriatim, of the articles proposed for the government of the Association.

The first article being under consideration, Dr. Kerfoot, of Penn. offered the following as an amendment, that the title be "The Conventional Association of the United States."

Which was lost.

Dr. Stout, of New York, proposed the following amendment, that the title be "The Medical Association of the United States of North America."

Which was lost.

The first article was then put to vote and adopted without amendment.

The second article being then before the Convention, Dr. Hays, of Penn., offered the following:

Resolved, That the report be referred back to the committee with instructions to report a plan of organization in accordance with the following sketch.

1st. The Society to consist of members to be elected by the Association, directly, or through its council.

2. Members before admission into the Association, to sign a promise to conform to the laws of the Association.

3. Members who violate this pledge, to be liable to expulsion, and to be deprived of the rights of brotherhood.

4th. For the appointment of a council to consist of the officers of the Society, and of councillors, to be elected annually, or all the former, and a portion at least of the latter, to be elected annually. The councillors to have the general superintendence of the concerns and publications of the Association, and to report the proceedings to the Association at its annual meeting.

After considerable discussion, Dr. Hays' resolution was lost.

It was then moved to adopt the second article.

Dr. Cabell, of Virginia, moved to insert after the word "Association," on the ninth line of the third page, second Article, of the printed copy, the words "but without the right of voting."

Dr. Askew, of Del., offered the following amendment, which was lost.

That the third section of the second article be amended, by adding the words "State and," between the words "each" and "local;" and that the word "ten" be stricken out, and the word "five" be inserted.

Dr. Sumner, of Conn., moved to adopt the whole of the remaining articles.

The question was then taken upon adopting the whole of the remaining articles, and was carried.

The question was then put upon the adoption in full of the report as amended, and was carried.

The Convention then took up the report of the committee on Medical Ethics.

Dr. L. P. Bush, of Del., moved to adopt the whole of the report, including the introduction.

Dr. John L. Atlee, of Penn., offered the following amendment, which was lost, viz.: in the fourth Section of Article four, to strike out the words, "in which they have been called," and to insert the words "of seniority, commencing with the youngest."

The question on Dr. Bush's motion, was then put to the Convention, and was carried.

The report of the Committee upon Registration was then taken up, and with the resolutions accompanying it, was adopted without dissent.

The Convention took a recess for ten minutes, to enable members to hand in their contributions to the committee appointed to receive them, for the purpose of defraying the expenses of the Convention. After the Convention had re-assembled, the President announced the following Committee under the 2d Resolution, accompanying the report of the Committee on Registration.

Drs. J. H. Griscom, of New York,
C. A. Lee, " "
A. Clark, " "
G. Emerson, of Pennsylvania,
R. D. Arnold, of Georgia,
Jno. D. Russ, of New York,
Lemuel Shattuck, of Massachusetts.

The following communication, from Dr. Robley Dunglison, on the publications of the Sydenham Society, was then read to the Convention.

To the President of the National Medical Convention.

Philadelphia, May 6th, 1847.

Sir,—I hope I may be pardoned by the Convention, for drawing the attention of its members to the *Sydenham Society of London*, which was instituted a few years ago, "for the purpose of meeting certain acknowledged deficiencies in existing means for diffusing medical literature," "not likely to be supplied by the efforts of individuals." It has been, and is, the purpose of the Society to carry its objects into effect by a succession of publications, embracing among others—*First*. Reprints of standard English works, which are rare or expensive. *Secondly*. Miscellaneous selections from the ancient, and from the earlier modern authors, reprinted or translated. *Thirdly*. Digests of the works of old and voluminous authors, British and foreign, with occasional biographical and bibliographical notices. *Fourthly*. Translations of the Greek and Latin medical authors, and of works in the Arabic, and other Eastern tongues, accompanied, when it is thought desirable, by the original text. *Fifthly*. Translations of recent foreign works of merit. *Sixthly*. Original works of merit, which might prove valuable as books of reference, but which would not otherwise be published, from the slender chance of their meeting with a remunerating sale;—such as bibliographies, alphabetical, and digested indexes to voluminous periodical publications, &c.

The Society was instituted in the year 1843, on the plan of the Camden, Parker, and other societies, and now consists of between two and three thou-

sand members;—the annual subscription being in England, £1, 1*s*, paid in advance—in this country *five dollars*, for which sum each member receives a copy of every book printed by the Society,—the duty and expenses of transmission being, of course, paid by the member, in addition.

The edition of the first year's books, (for 1843–4,) comprising *Hecker's Epidemics*, *Louis on Phthisis*, and *Sydenham's works* in Latin, consisted of 1750 copies; but owing to the large increase of members, it was found necessary to reprint them, and they are now in the hands of several members in this country. Of each of the works issued for the second year—1844–5—*Paulus of Ægina*, Vol. I., *Observations on Aneurism*, and *Simon's Animal Chemistry*, Vol. I., 2250 copies were printed; yet so great was the afflux of members after the time when it was necessary for the council of the Society to determine how many copies should be printed—the number of members being then eighteen hundred—that the whole edition was soon exhausted, and for some time the council have been unable to supply the numerous applicants for the second year's books. They may, however, be reprinted, although this is uncertain.

Constituted as the officers and council of the Sydenham Society are, of many of the most distinguished members of the profession in Great Britain, whose sole object in this undertaking is the benefit of that profession, and on whom great reliance may be placed that the good work will be faithfully and ably executed, I have been emboldened to lay before the Convention its claims to their attention, and to place before them for their inspection, a copy of each of the works issued for the year 1846–7, (one other, "the Works of Harvey," being in course of distribution, but not having as yet reached this country,)—and likewise a few copies of the *Report of the Fourth General Meeting of the Society*, held on the first of May, 1846, which contains further information in regard to the proceedings of the Society, its laws, &c.

I have the honour to be, with the greatest respect,
Your obedient humble servant,
ROBLEY DUNGLISON, *Hon. Local Secretary.*

N. B.—The other honorary local Secretaries of the Society, in this country, are Dr. T. R. Beck, of Albany, and Dr. C. A. Lee, of New York, delegates to the Convention.

Dr. Stevens, of New York, moved that the report of the Committee on the Nomenclature of Diseases, which was next in order, be referred to the American Medical Association, which was carried.

The Report of the Committee on the Separation of Teaching and Licensing, was then called up.

Dr. Reese, of New York, offered the following—

Resolved, That the report of the majority of the committee on the subject of separating the teaching from the licensing power in Medical Colleges, be adopted by this Convention, and published in its transactions.

Resolved, That the report of the minority be laid upon the table, and printed in like manner.

Dr. Leonard, of Maryland, offered the following, as a substitute for the foregoing, which was accepted by Dr. Reese.

Resolved, That in view of the necessity hereby declared for reform in the manner of conferring degrees, the two reports submitted by the committee on the separation of teaching and licensing, be published and referred to the committee on medical education, with instructions

to report at the next annual meeting of the American Medical Association, which was adopted.

The Convention then adjourned to 5 o'clock, P. M.

Evening Session.

At 5, P. M., the Convention met pursuant to adjournment.

Dr. J. V. C. Smith, of Boston, introduced the following Resolution, which was read and adopted.

Resolved, That the thanks of this Convention are due to the officers and directors of the various institutions, who have politely invited the members to visit them at their own convenience,—to the Committee of Reception and Arrangements, on behalf of the Philadelphia Delegation, for the spacious and elegant accommodations provided,—to the Academy of Natural Sciences, for the use of its Hall,—and to the whole medical profession of the city, for the marked kindness, personal attention, and generous hospitality, which have characterized their intercourse with this body since the commencement of its deliberations.

On motion of Dr. L. A. Smith, of New Jersey, it was—

Resolved, That those members of the Convention who left the city before the assessment of three dollars to defray expenses was made, be requested to forward that amount to Dr. J. Rodman Paul, of Philadelphia, by letter, or otherwise, as may be convenient.

Dr. Reese, of New York, introduced the following Resolution,—

Resolved, That a Committee be appointed to draft a memorial to the Congress of the United States, asking that a portion of the Smithsonian funds may be annually appropriated to the uses of the American Medical Association;—which was seconded by Dr. Meigs, of Philadelphia, but laid upon the table.

A like disposition was made of the following, offered by Dr. M. H. Houston:

Resolved, That a Committee of seven be appointed to report to the next annual meeting of the American Medical Association, such modifications of, and amendments to, the adopted plan of organization, as in their estimation may be imperiously required, in order to accomplish the objects of its original organization.

On motion of Dr. Thomson, of Delaware, it was ordered "that the names of the delegates, when published, should be arranged by States."

The following Preamble and Resolutions, introduced by Dr. Henry Carpenter, of Lancaster, were laid upon the table:

Whereas, The difficulties which sometimes unfortunately arise between physicians in their attendance upon the sick, are frequently owing to improper procedure, or representations on the part of the patients or friends, from an ignorance of the etiquette which should govern the conduct of the respective parties towards each other; therefore,

Resolved, That the President of this Convention appoint a Committee of three, to select such parts of the code of Ethics, adopted by

this body, as they may deem expedient, and report the same to the Convention for approval at its Session to-morrow morning.

2d, That the Committee of Publication have a sufficient number of copies of the same printed, and deliver, or send, to each delegate a suitable number.

3d, That delegates request the editors of the public journals, in their respective localities, to publish the same as proper and useful information for the people.

Dr. Garvin, of Georgia, introduced the following Resolution, which was adopted.

Resolved, That the thanks of the Convention be presented to their President, Dr. Knight; to the Vice Presidents, Drs. Stevens, Wood, Buchanan, and Harrison; and to the Secretaries, Drs. Arnold, Stillé, and Stewart, for the very efficient manner in which they have discharged the various duties imposed upon them.

Dr. A. Flint, of New York, presented the following Resolution, which was passed:—

Resolved, That it be recommended by this Convention to the medical profession of the States, wherein laws sanctioning and providing for the prosecution of dissections do not already exist, to unite in endeavouring to procure the passage of such laws.

Dr. Thomson, of Delaware, offered a Resolution relative to the organization of the "American Medical Association," but accepted as a substitute the following, presented by Dr. F. C. Stewart, of New York.

Resolved, That all unfinished business be referred to the "American Medical Association" about to be organized.

Resolved, That this Convention do now resolve itself into the "American Medical Association," and that the officers of the Convention continue to act as officers of the Association until others be appointed; which was unanimously adopted.

On motion, the President was requested to appoint a Committee, consisting of one person from each State represented in the Convention, to nominate officers of the Association for the ensuing year.

The following gentlemen were accordingly appointed:

Drs. H. F. Askew,	*Del.*	Drs. Corbin,	*Va.*
" Twitchell,	*N. H.*	" Moultrie,	*S. C.*
" Hall,	*Vt.*	" Garvin,	*Ga.*
" Adams,	*Mass.*	" Keirn,	*Miss.*
" Dunn,	*R. I.*	" Buchanan,	*Tenn.*
" N. B. Ives,	*Conn.*	" Harrison,	*La.*
" J. R. Manley,	*N. Y.*	" Litton,	*Mo.*
" L. A. Smith,	*N. J.*	" Frye,	*Ill.*
" R. La Roche,	*Pa.*	" Shipman,	*Ind.*
" Dunbar,	*Md.*	" Judkins,	*O.*
" J. Riley,	*D. C.*	" Annan,	*Ky.*

On motion of Dr. Bishop, of Connecticut, it was

Resolved, That the Delegates of every Society or Association, represented in this body, be requested to send to the Secretaries the

form of organization, or act of incorporation, and constitution of their Society or Association with a list of its members.

Dr. Griscom, of New York, moved that the Report on the nomenclature of diseases, be referred to the Committee on Registration, appointed at the morning session. It being objected that this committee was created by the Convention, the Association, on motion of Dr. F. C. Stewart confirmed the appointment of the Committee, and the Report was referred accordingly.

Dr. Humes, of Pennsylvania, offered a resolution, directing the Committee on Registration to report on the subject of premature interments, which was laid upon the table.

The Committee appointed to nominate Officers for the American Medical Association reported the following nominations.

President,—Dr. NATHANIEL CHAPMAN, of Pennsylvania.

Vice Presidents.—Drs. Jonathan Knight, Conn.; Alexander H. Stevens, N. Y.; James Moultrie, S. C.; A. H. Buchanan, Tenn.

Secretaries,—Drs. Alfred Stillé, Philadelphia; J. R. W. Dunbar, Baltimore.

Treasurer,—Dr. Isaac Hays, Philadelphia.

It was determined, on motion of Dr. J. L. Atlee, of Pennsylvania, that the vote of the Convention for Officers be taken *viva voce*.

Dr. A. H. Stevens, of New York, moved a reconsideration of this motion, which was carried, and on motion of Dr. Askew, of Delaware, the vote was ordered to be taken by ballot. Drs. Blatchfotd, of New York, and Haxall, of Virginia, were appointed tellers, and declared that the nominees of the Committee were unanimously elected Officers of the Association for the ensuing year.

On motion of Dr. Thomson, of Delaware, a committee of five was ordered to wait upon the President elect, and invite him to take the Chair. For this purpose the President appointed Drs. Twitchell, of N. H.; E. Ives, of Conn.; Corbin, of Va.; Jervey, of S. C.; and Annan, of Ky.

Dr. J. V. C. Smith, of Mass., moved to take up his resolution in regard to the next place of meeting of the Association, and the invitation of the Delegates from Baltimore having been called for and read, it was, on motion, resolved, that their invitation be accepted.

Dr. Watson, of New York, moved for a committee of seven, to nominate members of the Standing Committees named in the plan of organization, but the motion was so amended as to empower the President and Vice Presidents, to appoint these Committees in time for the publication of the proceedings, and the motion, thus amended, was passed.

On motion of Dr. N. S. Davis, of N. Y., his resolution relative to a committee, to report on the indigenous Botany of the several states was taken from the table and adopted.

Dr. Chapman, the President elect, was then introduced, and on taking the chair, made the following remarks:

He said he could find no language to express the depth of his gratitude. It had often been his good fortune during his professional life

to have been complimented in the same manner, though not in the same degree. This was the most precious of all the honours he had received, as spontaneously conferred by his own brethren. He confessed his incompetency to serve the Association as he could desire. He said he loved his profession, and should be ungrateful if he did not: whatever he possessed in this life, had been bestowed by its favours; when he forgot it, or deserted it and its disciples, he remarked with great emphasis, may Almighty God forget and desert me. He desired that the Association should be persuaded of his ardent wishes for the cause, and that his most strenuous efforts would be unceasingly directed to advance the dignity of the profession, and extend its usefulness.

The following was offered by Dr. John B. Johnson, of Missouri:

Whereas, numberless and important evils result from the almost universal practice of allowing persons wholly ignorant of drugs and medicines to engage as apothecaries; and still greater from the universal traffic in patent and secret medicines,

Therefore, resolved, that the Committee on Education inquire into the expediency of establishing a school or schools of Pharmacy in the respective States, for the special purpose of preparing persons for the business of apothecaries; and also the expediency of adopting a rule that no physician ought to patronize a druggist or apothecary who deals in patent and secret medicines—and report at the next annual meeting of the Association. Adopted.

The following was offered by Dr. F. Campbell Stewart, of New York:

Resolved, That the Committee on Publication be directed to have published not less than two thousand copies of the proceedings of the late Convention, with the Reports, and of this Association up to the period of its adjournment; and distribute the same to the members of the Association. Passed.

After which, on motion, the Association adjourned to meet in Baltimore on the *first Tuesday* of May, 1848.

At a meeting of the President and Vice Presidents of the "American Medical Association," held on May 8th, 1847, the following Standing Committees were appointed in pursuance of the order of the Association:

Committee on Arrangements.

Dr. G. C. M. Roberts, Balt., Chairman.

Dr. A. C. Robinson, Balt.	Dr. Wm. Power, Balt.
" J. H. Briscoe, "	" W. T. Leonard, "
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History of Typhoid Fever, as it prevailed near Geneva, N. Y., in the Fall and Winter of 1846-47. By Geo. C. Hay, M. D., of Geneva.—According to your request, I proceed to give you a brief account of the Typhoid fever, which recently prevailed in this region of country, and especially on the opposite shore of the Seneca lake. In that neighbourhood, fevers of a remitting type had prevailed quite extensively during the latter part of the last summer, and during nearly all the fall months, but not a single case, as I can ascertain, died of it at that time. In December, the first cases of the low form of fever showed themselves. All the cases which have occurred seem to be confined to a neighbourhood of from one to two miles square; and beyond the limits of this, as far as I can learn, no cases have appeared. The symptoms in the forming stage differ but little from an attack of ordinary fever, commencing with loss of appetite, sense of lassitude and disinclination to exercise of any kind, chilliness, pains in bones, etc. After twenty-four or forty-eight hours, headache came on invariably in all the cases, and in many it was the first symptom, and continued very obstinate through the whole course of the disease. About the third day the patients were generally obliged to take to their beds, the headache increasing, attended with vertigo, dimness of vision, ringing in the ears, suffusion of the conjunctiva and deafness. The tongue was at first covered with a thick white fur which changed by the fourth or fifth day into a brown, and finally into a black during the latter stages of the disease. In a great majority of the cases diarrhœa was a prominent symptom from the commencement, so much so that even the use of the mildest febrifuge medicine was inadmissible; this was controlled with great difficulty by opiates, and in some cases astringents had to be resorted to. Accompanying this diarrhœa, we found considerable tenderness of the abdomen in nearly all the cases. The discharges from the bowels were generally very watery, of a dark colour, very fetid, the urine scanty, sometimes entirely suppressed, and of a very red color. The skin was generally quite dry, although not very hot at any time, and in no case could I discover any of the "calor mordax" spoken of by writers, and which I have frequently felt in similar cases. As the disease progressed, in many cases delirium was a constant attendant through the whole course of the fever, and none were entirely free from it. In many cases the collapse came on very suddenly, and in others a gradual sinking came on, and steadily progressed until the patients died. The collapse seemed to bear no relation whatever to the severity of the first stage, as is generally the case, as sometimes in those who had been attacked but slightly the collapse was sudden and fatal, while in those whose stage of excitement had been very severe the collapse came on very gradually, and progressed slowly, and *vice versa*. As to the post-mortem appearance I can give you but little information, as owing to the prejudice existing among the people it was next to impossible to procure an examination. After I had left, however, one examination was made of a boy aged fourteen, who died very suddenly, and I understood from

a physician who was present, that his bowels were a complete mass of mortification. As to the treatment, it was very various. All the patients, however, had in the commencement mercury, in some of its forms, and in two cases which have since recovered, it was carried to the extent of slight salivation. Some cases were bled generally, and some not, but it seemed to make but little difference in the continuance or violence of the disease. The local treatment consisted in cold applications, leeches, and blisters to the head and nape of the neck; cups and blisters to the chest, when the symptoms seemed to demand; hot fomentations, poultices, leeches, and blisters to the abdomen, etc. In some cases we ordered the patients to be washed over the whole body with a solution of nitro-muriatic acid made as strong as they could bear it; this was done twice in twenty-four hours, and seemed at least to give considerable temporary relief to the patients. The general treatment was at first calomel, hyd. cum. cretâ, or pil. hyd., followed by the liquor ammoniæ acetatis, or spiritus ætheris nitrici, with the potassæ nitras or vinum ipecacuanhæ or antimonii; but in some cases, and indeed in many, their use was impossible, on account of the tendency to diarrhœa, as everything taken into the stomach ran off by the bowels in a short time. In all the cases stimulants and tonics had to be resorted to sooner or later, but generally with little benefit, although at first the patients seemed to rally under their influence, yet they seemed to have no permanent effect in many cases. Those used were the infusum serpentariæ, or columbæ, camphor, ammonia, etc., together with sulphate of quinine, port wine and brandy, with a nourishing diet of beef-tea, chicken-jelly, arrowroot, etc. I forgot to mention that the pulse was in most cases very frequent, from the commencement, ranging from 100 to 130 and 140 during the whole time. In some cases the pulse was quite full and hard in the commencement, but generally it was quite small and very easily compressed. I may say in conclusion that it seemed to matter little what course of treatment was pursued, the patients in a large majority of cases died, some during the first week, others running on four, six, eight, and ten weeks. In one family, five persons died, all between the ages of fourteen and thirty; indeed nearly all the cases have been young persons.—*New York Jour. of Med.*

Prizes offered by the Lexington Medical Society—Prize for the best Thesis.—The Lexington Medical Society resolved to offer a prize of fifty dollars, or a gold medal or piece of plate of that value, at the option of the successful competitor, for the best Thesis submitted for the Degree of Doctor of Medicine, in the Medical Department of Transylvania University, for the session of 1847–48. Those competing for this prize are at liberty to select the subject of the Thesis.

Annual prize.—The Society also resolved to offer an *annual* prize of fifty dollars, or a gold medal or piece of plate of that value, for the best original essay, on a subject to be selected by a committee. In accordance with the above resolutions, the committee propose, for

1847, a prize *for the best account of Continued Fever*, as it prevails in any of the States out of New England.

Remarks.—The Continued Fever of the Eastern States has been very carefully studied and very fully described. It is found to correspond exactly to the *typhoid fever* of France; and it is by that name that the disease is now generally called. The same disease is known to prevail extensively in some of the Middle, Western, and South-Western States; but throughout these regions it has not yet been very fully or thoroughly studied. This prize is offered as one means of remedying this defect.

Other things being equal, the prize will be awarded to that essay which contains an authentic and complete account and analysis of the largest number of cases of the disease; its leading phenomena during life, with the lesions in fatal cases; its average and extreme duration; the sex and age, and race, of its subjects; the season of its prevalence; and the prominent points of difference between it and periodical fever. It is very desirable that a careful examination should be made of the mucous membrane of the lower portion of the small intestines. Speculations about the remote and proximate causes of the disease will not add anything to the value of the essays that may be offered. The description of the disease must be sufficiently full and minute, to enable the committee to judge of the accurary of the diagnosis.

The committee also propose, for 1848, a prize *for the best account of the several forms of Periodical or Malarious Fever in the United States.*

Remarks.—This subject has already attracted so large a share of attention amongst physicians of the South and West, that some of them may be surprised at its being thus brought forward. But, extensively as malarious fever has been written about, there are many points of its natural history which need farther elucidation. Amongst these may be mentioned, particularly, the following:—the comparative liability of the sexes, of the black and white races, and of different periods of life, to the several forms of the disease; the influence of race upon its severity and danger; the relative proportions in different years and localities, of the three principal forms—intermittent, remittent and congestive; the most common type of the pure intermittent form; and the variations in the general character of the disease, in different seasons.

The essays must be sent, post-paid, to the Corresponding Secretary, Professor J. M. Bush, on or before the first day of January, 1848, for the first, and 1849 for second prize.

Each essay must be accompanied with a sealed address of the author. That of the successful competitor only will be opened. The essays will be considered as the property of the Society, to be deposited in their archives, or published in their transactions, as they may deem best.

The committee may suggest, that a convenient opportunity for forwarding essays from a distance, will be presented by the annual assembling of the pupils of Transylvania University, in the fall.—*Ibid.*

Faculty of Medicine of Paris—Lectures on General Pathology, by Professor Andral.—The seat of the morbid element by which disease is constituted may be sought for in three different parts of the system: 1, in the alterations of nervous influence; 2, in the changes of the blood; 3, in the changes which have supervened in those substances which emanate from the blood. In these three great groups many subdivisions should be introduced; and all diseases may either naturally, or with a little allowable hypothesis, be referred to one or the other order. Practically, however, we do not consider this classification applicable, and we prefer the following:—

We recognize fourteen great classes of diseases, viz.: 1, pyrexia; 2, hyperemia; 3, phlegmasia; 4, anemia, or hyperemia; 5, hemorrhage; 6, fluxes; 7, dropsy; 8, pneumatosis; 9, alterations of nutrition, or trophopathies; 10, gangrene; 11, traumatic diseases: 12, hemopathies; 13, alterations of secreted fluids, or crinopathies; 14, neuropathies.

A few words on each.

1. *Pyrexia.*—In this class the increase of temperature of the body is the only constant symptom; and pyrexiæ are also characterized by the fact that it is impossible to trace them to any alteration of solid texture When such alteration appears during the progress of fever, they are caused by the same morbid influence which first occasioned the febrile excitement. They are specially observed on the skin and mucous membranes, and consist of congestion, inflammation, or hemorrhage—either interstitial in the shape of patechiæ and ecchymosis, or discharged from the affected surface; fluxes, as in cholera, miliaris, &c., are also observed. In each pyrexia the local alterations not only may have a special form, but seem to affect a special seat; the cellular tissue sometimes; the limphatic glands in syphilis; in other diseases the salivary glands; gangrenous inflammation of the cellular tissue and skin in the plague. The blood may be altered in its composition in pyrexia, and this alteration is always the same, consisting in a diminution of its natural amount of fibrine. In many pyrexiæ a virus or poison exists in the system.

Pyrexiæ are continuous or intermittent, hence a natural division into two orders: in the first we must form numerous genera, and amongst these we may name synocha, inflammatory fever, typhoid ever, miliaris, typhus castrensis, yellow fever, the plague, variola, rubeola, scarlatina, cholera, acute farcy, and carbuncular fever. These various maladies are connected with each other by their essential characters, and some arise spontaneously; others are developed by contagion or infection; and several are special to particular latitudes.

The second order is constituted by intermittent pyrexiæ, in some of which no other morbid phenomenon, beside the febrile excitement, can be detected: in others the febrile paroxysms are attended with various accidents, much the same as those which may be observed during the progress of continuous fever: fluxes, for instance, or losses of heat (which have not, however, been thermometrically proved,) but

which have been known to cause death, as in the algid fever; hence a subdivision of intermittent fevers into benignant and pernicious. Cullen perfectly understood the connections between the two orders of pyrexiæ, so much so that as a type, in his description of fever, that illustrious author takes the paroxysm of ague. In the various parts of the globe, according to the intensity of the producing cause, of the different degrees of atmospheric heat, of the presence of marshes in mild or hot climates, we can observe the gradual transformation of intermittent into continuous fever, and reciprocally. They are different types of the same disease: but, like intermittent or continuous neuralgiæ, they are still the same malady.

Elevation of temperature is the only constant phenomenon which observation proves to exist in fever. Entering the field of hypothesis, may we not suppose this increase of heat to be the result of a more active combustion produced in the system by a temporary arrest of the nutritive movement? The removal from the system of a large quantity of nitrogen with the urine during fever, the production of an increased amount of water, carbonic acid, and bile in the same condition, for the separation of superabundant carbon and hydrogen, would seem to confirm our supposition. This arrest of the nutritive movement can occasionally be referred to the inference of a deleterious agent, external or internal, by which the vital properties are more or less interfered with, and the activity of nutrition slackened; or it may be attributed to an inflammation which calls to a limited part of the body an accumulation of blood, producing new secretions, a new mode of nutrition, a new and morbid elaboration of the elements of the blood; under the influence of a similar process, it is not impossible to admit that the general nutritive movement may be suspended, or at least rendered less active. All this is doubtless hypothetical; but a time comes when the mind, wearied with the dryness of the mere observation of facts, cannot resist the impulses of imagination; and such speculations, far from weakening its powers, serve, on the contrary, to enlarge its scope and to renovate its vigour.

2. *Hyperemia* is constituted by the accumulation of the blood in a part, due to the arrest or the diminution of the speed of its circulation; hyperemia is always attended with redness, sometimes with tumefaction; the serum of the blood, containing some albumen, but never any fibrine, may be extravasated during congestion. According to the nature of its causes, we divide this class into three orders: hyperemia due to increased excitability; hyperemia due to diminution of the powers of circulation; and hyperemia referrible to mechanical causes, impeding the return of venous blood to the heart.

3. *Phlegmasia.*—When congestion has been gradually transformed into phlegmasia, as the disease no longer remains limited to its solid seat; the blood is modified in its composition, and one of its constituent elements, fibrine, is increased in quantity. This latter circumstance is invariably connected with phlegmasiæ, when they are accompanied with febrile excitement; and yet fever alone will not produce it. We have never met with increase of fibrine in pyrexiæ. In

most cases it is the first order of hyperemia which passes into inflammation, but the two others may also terminate in a similar manner.

4. *Anemia, or Hypohemia.*—This class refers only to local anemia, a disease observed only in a small number of organs—the brain and gastric mucous membrane, for instance.

5. *Hemorrhage.*—Of this class we will say nothing, having on a former occasion treated the subject *in extenso*. Hemorrhages may, like congestions, be divided according to their cause.

6. *Fluxes* are in most cases the result of appreciable organic alterations; in others, on the contrary, the discharge is the only pathological fact which can be detected. They are characterized by the similarity of the fluid secreted with that of the fluid eliminated during health by the same organ. Fluxes have, according to their seat, been divided into three orders:—1, fluxes of the skin. 2, of the mucous membranes; in this order some authors place cholera, and not without some good reasons; we prefer, however, classing that disease with pyrexiæ. 3, fluxes of glandular organs, primary or consecutive to congestion or phlegmasia.

7. *Dropsies.*—We mentioned on another occasion that all dropsies might be referred to one of two causes: an obstacle to the circulation of the blood, or a change of its composition. Dropsy in no case can, therefore, be considered as a primary fact—as anything but a symptom; but it is a symptom of such magnitude—it is a secondary fact of such immense practical importance—that we consider ourselves fully justified in forming for it a special class.

8. *Pneumatosis.*—In this class are placed all the gaseous accumulations within the cavities of our organs. We have reason to suppose that gases may even exist in the blood, and, whatever be their origin, they occasion symptoms and diseases which must have a place in all classifications.

We now come to the consideration of other diseases, in which the alterations of the solids is the primary pathological fact:—

9. *Trophopathies, or Diseases of Nutrition.*—These may be congenital or acquired; hypertrophy, atrophy, softening and accidental productions (subdivided into homologous, heterologous, parasitical,) and the various genera of acquired trophopathies.

10. *Gangrene* is in itself a disease which may be brought on by many causes besides congestion and inflammation. It may be produced by an obstacle to capillary or arterial circulation—by the introduction of miasmata or morbid poisons into the system, as in the plague. It is, therefore, something more than a termination of inflammation, and deserves to be separately studied in a class peculiar to itself.

11. *Traumatic affections* form, with the two preceding, the group of diseases in which alteration of the solids is primary.

12. *Hemopathies or Diseases of the Blood.*—The first order contains the diseases resulting from changes of proportion of the natural elements of the blood, and in this order we find four genera:—The first of which refers to the changes of proportion of the globules,

which may be increased as in plethora, or diminished as in accidental or spontaneous anemia. In the second genus we place the changes of proportion of the fibrine—increased in inflammations attended with fever; diminished, on the contrary, and its diminution being a primary morbid fact, from which the other phenomena of disease may be derived—as in scurvy, or purpura;—or this dimunition being, as in pyrexiæ, not a cause but one of the possible results of the malady. In the third genus of the first order we place changes of proportion of the albumen in the blood; increase of the albumen has not hitherto been ever observed: its diminution is constant in one variety of dropsy. The fourth contains the changes of quantity noticed in the saline elements of the blood—a subject which has hitherto yielded to investigation only results of a negative nature.

The second order of hemopathies refers to diseases resulting from the introduction into the blood of principles not habitually contained in that fluid. This order is subdivided into three genera. The first, that in which the elements of our various secretions are found in the blood—for instance, tetanus; diabetes mellitus will probably, at a future day, be classed here. The second genus, that in which morbid products—like pus—are introduced into the blood. The third, in which it contains toxic principles, which may be modified in its constitution, or not changed in any appreciable manner. Here we must place diseases resulting from the passage into the blood of venous miasmata, virus of various sorts (rabies, syphilis, &c.,) or even mineral poisons, such as mercurial or saturnine emanations.

The third order of hemopathies is consecrated to asphyxia, in which, under the influence of various causes, the blood receives no oxygen, or an insufficient quantity of that gas.

13. *Alterations of secreted fluids* are mostly the result of other maladies; sometimes, however, they can be traced to no organic alteration whatever. Calculous affections of the bladder, kidney, and liver belong to this class, in which we must also place, for the present at least, diabetes mellitus. Albuminuria, when not connected with organic diseases of the kidneys, also should be classed here.

14. Neuropathies are primary disturbances of nervous action. They may be subdivided into the modifications of intellect, of sensibility, of motility, and of that nervous power which presides over the accomplishment of the functions of organic life.

Such, at the present day, is the most complete classification of diseases. This grouping into classes we have already said to be indispensable to the science of diagnosis, and to that of therapeutics.

London Medical Times.

Death from Starvation.—Dr. Leeson said he had been called upon on the previous Monday to make a post-mortem examination in conjunction with Dr. Brady, Professor of Medical Jurisprudence in the College of Physicians, on the bodies of two individuals, a man and woman, who had died suddenly, and, as was reported, from starvation. One of them died on Saturday evening, the other on Sunday

morning. Upon external inspection both bodies presented appearances of extreme emaciation. All the features of the female were remarkably contracted, the eyes sunk, nose pinched, and cheeks drawn in, giving her the appearance of a person upwards of sixty years old. The rest of the body was proportionally emaciated; the spaces between the metacarpal bones were perfectly hollowed out; the abdominal parietes when cut were totally devoid of the fat always met with in other subjects, and all the abdominal contents were perfectly bloodless; every organ was completely anæmic.

On cutting into the stomach, its rugæ were observed to be remarkably developed, and there was not a trace of food in it. The whole track of the intestines, though cut into in several places, had not the slightest trace of fœcal matter—containing only a little fœtid mucus. There was some ulceration of the intestinal glands at the lower extremity of the ileum. When the chest was opened, both lungs were emphysematous and perfectly anæmic. The left ventricle of the heart contained half an ounce of remarkably thin fluid blood.

The body of the male presented similar appearances, but the external emaciation was even much greater. The stomach contained a very small quantity of fluid, with a few grains of meal, but no trace of fœculent matter was observed until near the termination of the intestine, and even here its amount did not exceed a teaspoonful. The lungs were in a similarly emphysematous and anæmic condition, and the heart contained a small quantityof fluid blood. The gall-bladder, as usually observed in cases of death by starvation, was remarkably full, and the liver was lobulated, its eminences, however, being of a healthy kind.

In giving an opinion as to the cause of death here, Dr. Leeson remarked that from hearing the facts of the case—that up to the last period of their existence these poor creatures had *something* to live on, it could hardly be distinctly stated that they died of starvation: nor indeed do we find death from absolute starvation to be by any means a common occurrence, taking as an example, for instance, death by starvation, in consequence of several weeks total deprivation of food, as in cases of shipwrecked mariners, &c. In the present instance, however, it appeared that this poor man and woman, with six children, lived in the county Leitrim, and seeing the destruction of the potato crop, made their way up to town, where the whole family were huddled into a miserable apartment, not more than six feet square, with a damp floor and a roof that admitted the rain, a wad of straw that might now have passed for any other material, being its only furniture. Reviewing all the facts of the case then—their destitution previous to coming to town—their bare subsistence while here, having only a sum of 1s. 3d. a day for the support of six children and themselves—life, in fact, as well remarked by Dr. Brady, gradually ebbing away,—the opinion given was that death had arisen not from actual starvation, but from the state of general destitution in which they had so long existed—in want of lodging, fire, clothing, or proper nourishment.

He might here observe, that it is well known the soup obtained by such poor creatures as the above from the soup shops is entirely insufficient for the support of life without some addition of solid material, and this is more particularly true in reference to Paul's parish, where this man and woman lived, the soup there, from the poverty of the parish, being little more than meal and water, which, in the entire absence of solid food in the stomach, passes through the intestinal tract as it is taken in, or gives rise to diarrhœa. The facts of these cases led him to suggest that a certain quantity of solid food might be allowed once or twice a week to the suffering poor in addition to the distribution of soup, and to hope that some notice of the subject might be taken by the public prints.

After finishing the post-mortem examination of the above cases, they proceeded to an adjoining apartment, the area of which was certainly not more than six feet square, and here lay (if he might use the expression) a mere living skeleton, stretched on a portion of straw, the eyes sunken, and their whites suffused, cheeks hollow, nose pinched—in fact, absolutely famishing, unable to move, and just able to call in a voice that reminded him of the voice in cholera for a little water, stating that her mouth was like the burning fire, and it was perfectly parched. The emaciation was so great that her arms were no thicker than candles, and the legs were swollen. She was unable to say when she had tasted food.

In reply to a question, Dr. Leeson stated that no urine was contained in the bladder in either case. Delerium, he believed, too, is only observed in cases of absolute starvation, not in those of gradual starvation, as here.—*Dub. Med. Press.*

On the Treatment of certain Surgical Affections by Elevation of the Diseased Parts.—M. Gerdy has for some time been in the habit of treating certain inflammatory affections by placing the limb, or part, in such a position as to favour the return of blood to the heart. This plan has this advantage, that it does not exclude the application of the usual means of treatment; but, as is shown by M. Dupuy, it is in many cases in itself sufficient to effect a cure.

The question meets us *in limine*. What are the phenomena which are induced by elevating a part of the body? If the hand, for instance, be allowed to hang down, we observe that it becomes engorged with blood. Place it in the contrary position, and the livid colour disappears, and the vessels empty themselves. It is evident from this experiment that in the first instance the blood accumulates in the most depending part; in the other the reverse occurs, the blood readily finding its way toward the centre of the circulation. What is thus seen to occur in a healthy condition of parts, also happens under certain modifications in disease. M. Dupuy gives the following account of the practical application of the above principles:—

If the thumb or hand be inflamed, the patient is made to lie in such a position that the elbow is maintained in a position higher than the

shoulder. The fore-arm is placed perpendicular, supported by cushions, care being specially taken that the circulation is not impeded by bandages; the hand is then enveloped in bandages, to which tapes are fixed, and attached to the top of the bed. These means, with some simple modifications, are likewise made use of in inflammation of the lower extremities. M. Gerda raises the end of the bed by placing a chair under it, thus raising the foot upon the summit of an inclined plane. Once so placed, and care being taken that no injurious pressure is exerted, the patient must not move from the position even to satisfy natural wants; for he may destroy in a few minutes all the benefits which have been obtained by whole days of repose. Although elevation cannot be so efficaciously applied to the *head* and *trunk* as to the extremities, it yet may be employed to a certain extent. Supposing the *eye* to be inflamed,—the patient will lie with his head high, and on the opposite side to the one affected. Why are inflammatory affections and discharges from the *womb* so tedious in recovery, but for the stagnation of the blood in the organ? Let a woman, who has been accustomed to keep herself in the vertical posture, go to bed, and raise her hips by means of pillows, and she will soon find her case amended. The same principles apply to inflammatory affections of the face, breast, &c.

The advantage of this plan of treatment is not, however, confined to inflammation, but it is equally serviceable in ulcers, uterine hæmorrhages, and varicose veins. In many instances of the latter disease, in M. Gerdy's wards, elevation alone of the limb has been completely successful. The utility of the plan is also incontestable in varicocele. The communication of M. Dupuy terminates with these conclusions:

1st. That elevation of the diseased part is able, without the intervention of other therapeutical measures, to cut short certain inflammations, if it be employed sufficiently early.

2nd. That in phlegmon it relieves pain by diminishing the quantity of blood in the part.

3rd. That it advances the cure of engorgements and chronic profluvia of the uterus.

4th. That certain hæmorrhages may be suspended by it.

5th. That it is able to cure certain ulcers of the lower extremities.

6th. That varices and hæmorrhoids are advantageously modified by elevation.

7th. That where it is not sufficient in itself to effect a cure, it is always a potent auxiliary.—*Provincial Med. and Surg. Journ., from Archives Générales.*

Method for preventing the projection of the Bones in Fracture of the Leg.—The leg is to be placed in the bent position on the outside, with a common side splint placed above and below, slightly hollowed out to fit the leg. In addition to these, two straight splints are used, padded on one side,—one of sufficient length to extend from the patella to the upper part of the lower third of the leg, the other long

enough to reach from the hollow of the knee to beyond the heel. If the straps be now passed round the leg, including the shorter of the two straight splints on the front, and the longer splint on the back of the leg, along with the two bottom splints on the upper and under side, the tibia and fibula above the fracture will be pushed backwards, whilst the foot with the part below the fracture is pressed forwards. In this manner the tendency of the tibia to pass forwards, after simple dislocation or fracture near the ankle, is effectually presented.—*Ibid, from Ormerod's Clinical Observations.*

On Etherization.—In our historical notices of the effects resulting from the use of ether, we have endeavored merely to record the facts as they arise. It would seem, however, that the article in our last number has led to some misapprehension. In alluding to the alleged fatal effects of this substance, we thought we had been sufficiently cautious. It was asked, "is this result, the effect of ether? an answer in the affirmative cannot be decidedly given, but all such cases require to be put on record." We continue to be of the same opinion, and shall put on record all the fatal cases that occur *after* the employment of ether, being satisfied that it is of the utmost consequence to ascertain whether it be innocuous or occasionally dangerous, and in the latter case, what are the contraindications to its employment. A correct judgment can only be formed by further experience and multiplied observations. We deprecate alike the excessive enthusiasm which insists that under no possible circumstances, ether can be, or ever has been prejudicial, and the unreasonable timidity which prevents the employment of a useful agent, because, in a few cases, injurious effects have been apparently occasioned by it.

During the past month Etherization has been extensively practised, but few novelties have been published with respect to it. Its advantages and applications are still debated at the meetings of the Academy of Natural Sciences and the Academy of Medicine in Paris. We observe, however, that the cases noticed in our last number have produced an effect on the warmest advocates of inhalation. Even MM. Velpeau and Roux, though still maintaining its great advantages, now speak of the necessity of caution in its use. This is as it should be.

The third case to which we alluded, as likely to be fatal *after* the use of ether, in the Royal Infirmary has since expired. It was a case of tibio-tarsal amputation, under the care of Mr. Syme. A girl, aged 14, of good general health, was affected with caries of the tarsal bones, and fistulous openings leading from them. The amputation was performed in the usual manner on the 24th of February, without the slightest pain, the ether having produced its full effect. She died April 5. On dissection the blood was found unusually fluid, and secondary purulent deposits existed in the lungs, left kidney, right knee, and left hip joint. Such are the *facts*. As to whether death in this, or the other two Infirmary cases, resulted from the etheriza-

tion, that is a matter of *opinion*. Some say no, others say yes. It is the first fatal case of tarsal amputation which has occurred in Mr. Syme's practice, and it is only right to state that in his opinion it is attributable to the ether. The observation of other cases will sooner or later decide the point.

Applications.—In the case of a young man, aged 23 years, subject for some years to epileptic attacks, which returned every 15 days, M. de Rabodanges caused ether to be inhaled, the evening before the day on which the attack was expected, with the result of preventing it. (*L'Union Medicale*, No. 42.) M. Marc Dupuy has injected large doses of ether into the rectum of two dogs, and found that in this way it will cause perfect loss of sensation. Slight inflammation of the mucous membrane was produced in one case. (*Ibid*, No. 24.) M. Stolz, of Strasburgh, has published a case of turning, in which he met with considerable resistance, in endeavoring to pass his hand into the uterus, notwithstanding the complete insensibility of the patient, by means of ether. He concludes from it that ether in no way facilitates the turning or extraction of the fœtus.—*Monthly Jour. of Med. Sci., from Gaz. Med. de Stras.*

Epidemic of Scurvy in Edinburgh.—A very singular epidemic of scurvy has broken out among the railway labourers in the neighborhood of Edinburgh. On the day we write this, no less than 92 cases of the disease, in all its different stages, may be seen in the Royal Infirmary, special wards having been opened for their reception. In the autumn of last year a similar epidemic occurred among the prisoners of the General Penitentiary at Perth. Both these epidemics have fortunately found an able historian in Professor Christison, who, at the last meeting of the Medico-Chirurgical Society, read an elaborate memoir, abounding in novel views of the etiology and mode of treatment of the disease. We shall have the pleasure of presenting our readers with this valuable contribution to medical science in our next number.—*Ibid.*

Observations on the condition of Asphyxia, or Insensibility, induced by the inhalation of ether; and of the indications to be fulfilled in the Treatment of the Effects of its Maladministration. By Charles Searle, M. D., M. R. C. S. E., of Bath.—In the Medical Times of the 19th ult. is a report, made to the Académie de Médecine à Paris, by M. Amussat, of his experiments on animals under the influence of the vapour of ether, in which he said:—"that, during the condition of insensibility induced by the ethereal inhalation, the blood in the arteries was found to be of the venous character, and resumed its florid appearance when the state of unconsciousness had ceased. And that, in animals which had died during the inhalation, the blood was found of the same venous colour in the heart, veins, and arteries." If such are the results of M. Amussat's experiments, they establish,

beyond doubt, the correctness of my views on the subject, published in the Medical Times, under date of Jan. 5, to the effect that the condition of the patient under the influence of the ethereal vapour is that of asphyxia; and that the sedative or narcotic effects of ether as ordinarily administered is of the same character. Its stimulant operation when so administered, that is, by the stomach, I must, however, first explain, or the views I entertain of its inhalation will not be rightly apprehended. To make this understood, it is necessary for me first to observe that life, the attributes of which are heat and motion, is the result of the chemical action developed in the animal system by the agency of the oxygen of the air inspired in its combination with the hydro-carbonaceous constituents of the food existing in the blood—caloric and electricity, the actuating stimuli of all vital phenomena, being evolved in the process. And as this process of chemical combination and electrical evolution, we may justly infer, takes place more particularly in the capillary or hair-like vessels, wherein the particles of the blood are brought into the closest approximation, and in which the final changes in its composition in relation, at least, to the conversion of arterial into venous blood takes place, hence the excitement of these vessels and motion of the blood in the capillary vessels, or organic life of animals; capillary action being the first visible motion to be discerned in the egg in the process of incubation, and the last to be discovered in animals when death takes place. These views I submitted to the profession as long back as 1830, when I had the honour of reading to the Westminster Medical Society a paper on the subject, and have since enlarged upon in a work recently published, entitled "The Philosophy of Life, Health, and Disease."

Now, the transitory stimulating effects of ether, when received into the blood from the stomach, is in virtue of its composition, it being a compound of carbon and hydrogen; its absolute composition is carbon, hydrogen, and oxygen; but the latter, it is presumed, exists in combination with its equivalent of hydrogen in the character of water —that it virtually is, as I say, a hydro-carbon. This, then, we may fairly presume, from its highly inflammable nature, must exist in a looser state of combination, or a condition of greater affinity for oxygen, than that of the fatty or other hydro-carbonaceous constituents of the blood, and would, therefore, when received into the general circulation from the stomach by predilection of affinity, enter immediately into combination with the oxygen of the blood, and a more active combustion, and, by consequence, excitement of the capillaries of the general system, would ensue; and thus the stimulating qualities of ether, in common with other hydro-carbonaceous alcoholic fluids which operate in like manner. And hence Mr. Spalding, the celebrated submarine operator, found that, when he drank alcoholic beverage, he required a greater amount of air being supplied to him during his operations. But the stimulating qualities of ether are of a very transitory nature, these effects being soon followed by its opposite condition of narcotism; but before I proceed with these, its

effects, as ordinarily administered, I must explain that of the insensibility induced by its inhalation.

The offices of respiration, are, the exhalation of carbonic acid gas, and the reception into the blood of its equivalent of oxygen. Now, in the ethereal inhalation, as the air of the lungs presented to the blood for absorption is not only diluted with this vapour, but in admixture also with this hydro-carbonaceous compound, the latter, when imbibed from the air-cells in admixture with the air, from its greater affinity for oxygen than the constituents of the blood, immediately seizes upon the oxygen, and, combining therewith, thus de-oxidates the blood in the lungs, whereby the blood, thence returned to the heart for general circulation, is deprived of its vitalizing qualifications; and hence defective capillary excitement of the heart and brain, and of all the functions, and thus the condition of insensibility and asphyxia induced: limited, of course, by the extent and period of the inhalation; but involving, necessarily, caution that it is not carried to too great an extent, considering that it virtually consists in a species of burking.

We may now comprehend the narcotic and sedative influence of ether which so soon succeeds to its use when received into the blood from the stomach. It having, as I have already explained, by its union with the oxygen of the blood in the general circulation, produced a certain amount of excitement, other portions of the ether existing in the blood, in their circulation through the lungs, enter into combination with the oxygen of the air imbibed, and here de-oxidating the blood at the expense of the general system, produce effects, though less in degree, yet analogous in kind, to its inhalation—narcotism; and thus its sedative influence and reducing power. And thus are all the operations of ether, I am of opinion, very satisfactorily accounted for, and established as such, I think I may venture to say, by the expreriments adduced of M. Amussat.

Reverting to a former observation, I may be permitted to add, that precisely in character with the operation of ether, in producing both excitement and asphyxia, are the effects of alcohol, though modified in description by the difference that exists between them: alcohol being soluble in water, and mixable with the blood; and ether not so, but much more volatile and combustible. Alcohol is accordingly much more permanently stimulant in its effects, and only asphyxiating when received into the system in a concentrated form, or where the quantity in a more diluted state has been so considerable that the blood in its passage through the lungs has become incapacitated for transmitting oxygen for the purposes of the general system; that is to say, the amount of alcohol present in the vital stream de-oxidates the blood in the lungs before it is returned to the heart for general circulation; and hence the more enduring condition of insensibility which succeeds intoxication, the whole vital stream abounding with its polluting influence.

If the explanation afforded be considered the true one, the circumstances prohibiting it use are obviously those of feeble power, as well

as apoplectic predisposition, as the effect of all narcotics and reducing agents on the system is to produce venous congestion; and, from reasons afforded in my work "On the Philosophy of Life," but too lengthy in description to be here adduced, and more especially manifested in the liver and brain; hence there was found, on examination, in the case of death recorded from ethereal inhalation, congestive fulness of the blood-vessels of the brain; and, moreover, that bleeding was found useful in the recovery of dogs which had been rendered apparently dead by its use, as so stated in France. But the most obvious and direct indication to be fulfilled, in the case of its maladministration, is the re-excitement of capillary action by the inhalation of oxygen gas; subsidiary to this, or when this is not immediately available, judicious blood-letting is the next object, followed by the excitement of the skin, and respiratory function of the lungs, by the sudden splash of cold water, followed by galvanism and artificial respiration in extreme cases. And, as an internal stimulant, ammonia, alcoholic fluids, or agents of the like character, being interdicted, nitric acid might prove more useful in these cases than ammonia. In India I once drank an entire drachm in a tumbler of water, and with, I thought soon after, decided exhilarating effects. In addition to these means, warm salt-water clysters are clearly indicated; and, although the last to be noticed, I am not sure that it is the least in importance, an emetic may prove a useful ancillary.—*London. Med. Times.*

Excision of a Fatty Tumour without Pain. By Dr. Johnstone, of Madras.—Our knowledge of Dr. Johnstone, as well as the inherent correctness of the report, induces us to publish the following case:

Mrs. ——, European, of a well regulated mind, a well formed figure, and a system remarkably free from any kind of nervousness. Has been six years and a half in India. General health good. Before leaving England, she observed a tumour about the size of a field bean over the posterior aspect of the right shoulder. It continued to enlarge gradually but slowly, and at the end of five years had attained the size of a small egg. For the last two years it has increased much more rapidly, and now constitutes a tumour of an adipose nature, lobulated, mobile and kidney-shaped. It measures about six inches in length, four inches in breadth, and two and a half inches in thickness at its thickest part, and stretches from the spinous process of the seventh cervical vertebra, downwards and outwards towards the acromion and outer third of the spine of the scapula, along the upper border of the trapezius muscle. A sensation of weight and slight numbness of the right arm are the chief inconveniences complained of.

Various kinds of treatment having been useless, the patient determined on having it removed. Dr. Johnstone having carefully examined into the evidence brought forward by Dr. Esdaile of Calcutta, in support of the fact of his having performed upwards of one hundred painful surgical operations within the last two years upon natives, under the influence of alleged mesmeric agency; having also read

the favourable report of the committee appointed by the honourable the deputy governor of Bengal, to observe and report upon such operations, he advised his patient to try the effect of mesmerism previous to the operation. She consented, and he succeeded on seven following days in putting her into a cataleptic sleep, in which she latterly was unconscious of pinching, pricking with a pin or lancet, and of the manipulation of the tumour. On the eighth occasion, January 9th, 1847, the tumour was removed in the usual way, by means of two elliptical incisions, each seven inches and three lines long, and subsequent dissection of the morbid growth. Three arteries required ligature. The edges of the wound were brought together by four stitches, supported by straps of adhesive plaster. Dr. Smith, Mr. S. S. Young, surgeon, and patient's husband, an apothecary, and a nurse were present. Professor Key had promised to attend, but was unavoidably detained in his class room.

The time of the operation, from the commencement of the first incision to the application of the last roll of bandage, amounted to eighteen minutes, during all of which time, not the slightest trace of suffering or sensibility on the part of the patient could be detected. The pulse continued unchanged at eighty, as S. S. Young satisfied himself, and the respiration perfectly tranquil; no moan or sigh escaped her lips—no alteration in the impression of her features was observed—no instinctive motion or wincing detected; once only she moved her head instinctively to free her mouth and nostrils from a little pool of blood which had collected about them, and was interfering with her breathing. She was easily demesmerized, before which care was taken to conceal as much as possible all traces of the operation. When she awoke the following dialogue ensued. "Well, have you been asleep to-day?" "Yes, I think I have." "Do you think you slept more soundly to-day than yesterday?" "I cannot say." "Did you feel me turn you or do any thing to you to-day?" "No, but I feel something smarting, and my face and my eyes feel stiff." She now put her left hand up to her shoulders as she had often done before, and perceived that the tumour had been removed, of which she confessed perfect unconsciousness. The stiffness of the eyelids and face was caused by dried blood. Pulse eighty—respiration natural.

The tumour weighed 3 lbs. 1 dr. two hours after removal. The wound was dressed with cold dressings, and almost entirely healed up by the first intention. She suffered no pain in the wound, continued perfectly free from fever, and was confined to her room only one day. The pulse continued at eighty for two or three days after the operation, when it rose to ninety, apparently its natural standard. She speedily recovered, and now feels better than she did previous to the commencement of the mesmeric sittings.—*Monthly Journ. of Med. Science.*

On a source of fallacy in testing the Urine for Sugar. By G. Owen Rees, M.D., F R. S., Assistant Physician to Guy's Hospital, and Principal Medical Officer to the Pentonville Prison.—The many

sources of fallacy connected with the examination of the urine are not, perhaps, so fully recognized by the profession as they ought to be.

These fallacies, inasmuch as they interfere with a due appreciation of symptoms, tend seriously to affect the correctness of diagnosis in urinary affections; and I therefore think it well to publish from time to time such facts as may come under my notice in relation to the subject.

A short time ago I received a specimen of urine said to contain both albumen and sugar in considerable quantity. The presence of sugar had been determined to the entire satisfaction of the medical attendant, who had demonstrated it to some friends, who had become equally well satisfied on the point. On examination, however, though I found albumen in abundance, I could not detect the slightest indication of sugar, notwithstanding that I used the same specimen of urine from which others had obtained satisfactory evidence.

On relating the result of my examination to my friend, from whose patient the urine had been obtained, I received an exact account of the manner in which sugar had been sought for, and was shewn the effect produced in the specimen by boiling with a solution of caustic potash—the excellent test proposed by Mr. Moore. I now perceived the whole contents of the tube to be of a deep brown colour, and should have been somewhat shaken in the fidelity of my own observation, had I not on a previous occasion applied this same test to the specimen, with a negative result.

I now observed that the liquor potassæ which had given the reaction had been kept in a white glass bottle, and immediately suspected that it might consequently contain lead; and that the dark colour produced, generally known as indicating the presence of sugar, might in this case be owing to the formation of sulphuret of lead; for lead dissolved in the liquor potassæ would unite to the sulphur of the albumen during the boiling, and I had satisfactorily ascertained the presence of albumen in this urine.

The liquor potassæ with which I had obtained a negative result was free from lead. On testing that of my friend, however, with hydro-sulphuret of ammonia, the black sulphuret of lead was thrown down in considerable quantity, shewing the correctness of the foregoing explanation.

It is very important that this source of fallacy should be borne in mind, as Mr. Moore's test is very much used for ascertaining the existence of diabetes mellitus: and liquor potassæ is unfortunately too often kept in white glass bottles, instead of in those of green glass, which contain no lead in their composition on which the alkali can exercise a solvent action. The hydro-sulphuret of ammonia, applied as above described, will at once shew the practitioner whether or not his liquor potassæ be free from lead, in which case it produces no change of colour on being boiled with urine, even when albumen is present in large proportions.—*Lon. Med. Gaz.*

Medical Problems. By WILLIAM GRIFFIN, M. D., Physician to the County of Limerick Infirmary.

When miscarriage or premature labour takes place at fixed periods, from the influence of acquired habit, may not the periodical movements be prevented by such remedies as prevent the recurrence of an epileptic fit or a paroxysm of ague?

I was called on some years since to attend Mrs. C., a lady who was ill with the usual symptoms of miscarriage at the third month. She informed me, that she had had a miscarriage at the end of the third month of her first pregnancy. She reached nearly to her full time on the second occasion, fell into puerperal convulsions in her labour, and was delivered of a dead child. In her next pregnancy she had a miscarriage at three months; in her fourth at three months; and now in her fifth she was again threatened exactly at the same period. She informed me that everything had been done to prevent it. She had been bled repeatedly, kept for weeks upon low diet, and was confined during the time entirely to the horizontal position. She lived, in fact, between the bed and the sofa. In this new attack some friends recommended her to send for me, with the hope of having some plan of treatment devised by which she might be enabled to go on to her full time. The amount of the hæmorrhage was, however, so considerable, and the uterine pains so general and regular, I told her it was impossible to prevent the miscarriage, but if I was informed of her condition on any future occasion, when six weeks or two months should elapse, I might, perhaps, succeed. Miscarriage, I believe, took place on that night or on the next morning.

In three or four months afterwards I received an intimation from this lady that she was two months pregnant. On considering the probable causes of the previous miscarriages, I could not detect any very obvious one. Her health was excellent, her habits regular, her diet moderate. The extreme regularity with which the miscarriage always occurred at the end of the twelfth week rather confirmed the only conjecture I could form, that it depended wholly on the influence of an acquired habit; and the question necessarily arose, how was this acquired habit to be interrupted or controlled? All the ordinary measures had already been adopted, and the poor lady had been subjected for weeks to the most irksome and tantalizing restrictions, without the slightest advantage. In this difficulty it occurred to me, that as periodical attacks of epilepsy may often be prevented by a long course of any of the metallic tonics, the periodical movements connected with the action of the uterus might be also under their control. I therefore directed my patient to take two and a half grains of oxide of zinc, with two grains of extract of hops, three times a day, and after each pill, two table-spoonsful of a mixture of valerian, aromatic spirits of ammonia, and infusion of snake root. She was also ordered a box of pills, containing a grain of opium in each, one of which she was to take when pain came on, and to repeat the dose every hour until relief was obtained. As she was of a nervous

habit, I thought, if my view of the case was a correct one, that both bloodletting and confinement to the sofa would rather tend to increase than lesson the danger, by weakening the general tone of the system, and rendering her more susceptible of slight impressions. I therefore advised her, instead of lying all day upon the sofa, to keep out in the open air on fine days as much as possible, without, however, fatiguing herself, and to live in the manner she usually found to agree best with her. Under this plan of treatment, she passed the twelfth week without the slightest threatening, to her very great joy and the gratification of her friends. Happening, however, in about a fortnight afterwards, to visit a sister who was very ill, she was so shocked at her appearance that she was immediately seized with the usual symptoms premonitory of miscarriage. She had a discoloured leucorrhœal discharge, which, in a few hours, was followed by uterine pains, being exactly the symptoms which had ushered in all her former attacks. She took the opium pills as I had directed her, and before morning the pains and discharge had all subsided, and in a day or two she was as well as she had been before. She then resumed the zinc and valerian for three or four weeks, after which period I did not consider it necessary to continue them. She went on to her full time without the slightest uneasiness, and was finally delivered of a fine child, which is now well and thriving.

Very soon after this lady had applied to me, and when I had just obtained strong presumptive evidence of the success of the treatment adopted, Mrs. H. consulted me with a view of obtaining advice as to the best means of preventing premature labour, which, she feared, was about to come on. It had already occurred to her four times successively; the infant dying in the middle of the sixth month, and her delivery of a dead child taking place at the end of it. She had now completed the fourth month of her pregnancy. On making some inquiries to ascertain whether she had had at any time a syphilitic affection, I could only glean, that she had suffered with soreness in the vagina for three or four months after her marriage, for which mercurials had been prescribed. This was obviously a very different case from the one already related. In the latter, hæmorrhage and pain came on first, and the child died as a consequence. In the former, the child died in the first instance, and premature labour followed. In Mrs. C.'s case the mere influence of habit, the tendency in the constitution to be influenced periodically, brought on labour. In Mrs. H.'s case the infant died through some unknown cause, and labour came on because of its death. There did not appear, therefore, to be any analogy which could suggest a treatment precisely similar. Taking into consideration the probability of the child's death being occasioned by some syphilitic taint in the habit, I therefore decided on giving calomel and opium in small doses, so as to affect the gums slightly; and subsequently with a view of preventing the accession of labour at the end of the sixth month, from the influence of habit, to adopt the same plan which had been pursued so successfully in the case of Mrs. C. After a fortnight or three weeks

the gums became sore, upon which the calomel was suspended, and pills of oxide of zinc, with the valerian mixture prescribed for Mrs. C., were substituted. Under this treatment, Mrs. H. passed the usual period at which labour came on, and continued in good health to the 7th July, when she was attacked with griping pains and slight flooding. These symptoms subsided by keeping perfectly at rest, and taking a few anodyne pills. On the 17th of the same month, when she had reached within four weeks of her full time, she was seized with threatenings of labour, and on the 19th was delivered of a living child, which died after some hours. This lady resided in the country, at a considerable distance from me, and could not receive that immediate attention and advice, which, if she had been in town, would probably have enabled her to go to her full time.

About the same time these cases were under my care, I was consulted by Mrs. A., who had also been seized with premature labour, in consequence of the infant dying in the seventh month for three successive years. In her last labour she was seized with violent puerperal convulsions, during which she was delivered of an infant, which had evidently been dead for many days.

I had not had the medical management in the earlier labours, and was merely called in a little before the lady's confinement; and in the last I had, therefore, no opportunity of adopting any preventive treatment. When she was again pregnant, however, and approached the seventh month, I adopted the same treatment as I had done in the former cases, partly to counteract, if possible, any tendency to labour arising from acquired habit, and partly that I thought it not impossible the same influence which was capable of controlling a periodical movement in the system comprehending months, might also control causes tending to the death of the child. The lady took the oxide of zinc pills and valerian mixture, three times a day, for some weeks before the period when labour might be expected; and she had opium pills by her, one of which she was directed to take whenever she was seized with uterine pains. These last she had no occasion to take, having gone on remarkably well to her full time, when she fell into natural labour, and was delivered of a living child: it expired, however, almost immediately after. It was obvious here, that the treatment had actually accomplished both the objects I had in view; it had broken up the morbid habit, and it had so interfered with the poisonous influence which had heretofore so invariably, in the seventh month, caused the death of the child, that the latter was born alive. Its death so soon after birth, without any obvious cause, suggested the possibility of some syphilitic taint in the parents, which led to very particular inquiries. The father, it appeared, had not had a syphilitic affection for ten years before his marriage, and never had one since. Acting, however, on the possibility that, even after that long period, some deleterious influence might have been communicated to the mother, and thus evinced itself in the feeble vitality of the offspring, I placed the lady, as soon as she was out of her confinement, under a mild course of calomel (one grain every night,

until her gums became tender,) and again, when she reached the dangerous period, resorted to the zinc and valerian. I had now the happiness of finding all my hopes realized; she went to her full time, and had a fine living infant, which has since been going on well.

In the first of the cases I have given, in which abortion occurred apparently from the acquired habit, the treatment was quite successful. The disposition to premature action in the womb was controlled exactly as the movements to a fit of epilepsy or of ague might have been arrested by some similar means. Quinine, carbonate of iron, or nitrate of silver, might have accomplished the object probably as well as the oxide of zinc and valerian. The latter were preferred chiefly because I believed they would be less likely to injure the fœtus, but also because I had considerable confidence in the influence which both, and especially which large doses of valerian, possess over the nervous movements. In the second case, the lady, who had fallen into labour on four successive occasions at the sixth month, in consequence of the death of the child, carried her child to the eighth month, and it was born alive. This instance, however, can hardly be adduced as evidence of the influence of the zinc and valerian, as it seems probable the death of the child, and consequent premature labour, were owing to some syphilitic taint, which was removed by the mercurial treatment. In the third case,—that of Mrs. A. Z.,—the inference as to the truth of the principle assumed may be considered more satisfactory, as she reached her full time, and had even a living child before the mercurial treatment was adopted.

These cases are so few in number that I offer them to the profession as evidence of the novel application of a principle long recognised in the treatment of epilepsy, ague, and other periodical diseases, with some diffidence. The legitimate manner, however, in which the analogy was inferred, and the remarkable success attending the remedial measures is suggested, were too striking not to make a deep impression on my own mind.

The extreme difficulty, too, which practitioners so often feel in the prevention of abortion and premature labour, as well as the deep interest which married people naturally attach to successful treatment in such cases, invest suggestions supported by even a very limited experience with some importance. The valerianate of zinc, which was not in use at the time these cases were under treatment, would have been a far more desirable preparation, and probably quite as effective. Where it is necessary to continue medicines of this class for a long period, it is a great object to be in possession of such an elegant substitute for so disagreeable a mixture as the valerian.—*Dublin Quart. Journ. of Med. Sci.*

Case of Double Amputation. By M. Brouzet.—M. Brouzet relates the case of a man on whom he practised amputation of both legs below the knee, the one immediately after the other, on account of injuries inflicted by a wheel of a railway carriage. The patient suffer-

ed comparatively little from the double shook of the injury and the amputations, and made a speedy and perfect recovery.—*Revue Medico-Chirurgicale de Paris.*

It has been laid down as a precept by two French surgical writers, M. Velpeau, and M. Vidal de Cassis, that the system being unable to stand the shock of a double amputation, two limbs should never be amputated at the same time, at least in such cases of injury as necessitate amputation above the wrist or ankle joints. It appears to us that there are cases, in which no general rule can be laid down, and in which the surgeon must be guided entirely by his own discretion. The propriety of operative interference must depend on the features of each individual case. Two other cases are mentioned by M. Brouzet, of recovery from simultaneous double amputations. In the Hotel des Invalides at Paris, many veterans may be seen enjoying good health, who have lost more than one limb in action, and many cases might be cited, where recovery has followed this severe mutilation.

We have heard of both limbs being amputated at the same moment, by different surgeons, in cases of this kind, but we are doubtful whether the shock to the system is less than when the two limbs are amputated successively.—*Monthly Journ. of Med. Science.*

Free Trade in Poisons.—A trial for manslaughter by poisoning with Godfrey's cordial took place at Guildford on Saturday last, and it came out on the cross-examination of one of the witnesses, that laudanum and Godfrey's cordial were sold at different shops in the town in common with *grocery, cheese, candles,* and *drapery!* One of the shopmen, in answer to a question put to him by the counsel for the defence, said very innocently that he did not know whether they kept prussic acid and arsenic, as well as laudanum, among their articles of grocery!

Not long since a superintendent of police went in disguise to a general shop in a country village and asked for two pennyworth of arsenic. It was immediately weighed in the scales in which coffee and other articles were weighed, and handed to him by the old woman who kept the shop. Upon asking her whether she was not in the habit of marking "poison" upon articles of this kind, her answer was: "Lor bless you, I can't write to begin with, and then it would frighten people if poison was written on it." This experiment was made in order to ascertain with what facility enough arsenic might be procured to destroy the lives of almost *one hundred persons:* and it was perfectly successful! It furnishes a clue to the cause of the abundant occupation given to coroners, magistrates, judges, barristers, and others, in detecting and punishing individuals for the perpetration of crimes which the Government takes not the slightest pains to prevent.—*Lond. Med. Gazette.*

Monument in Westminster Abbey to John Hunter.—Meetings have lately been held at the Royal College of Surgeons, attended by most

of the surgeons of the metropolitan hospitals, for the purpose of organizing a committee among themselves, in co-operation with the Council, for the purpose of raising a monument in Westminster Abbey to the memory of John Hunter. The circumstances under which the proposal was made are exceedingly creditable to all parties; it appears that after the delivery of the late Hunterian oration, when the members of the Council, with their distinguished visiters, dined at the Freemasons' Tavern, the Rev. Dr. Buckland, the eminent geologist, in returning thanks for his health, stated that soon after his installation to the deanery of Westminster, whilst walking round the Abbey with Professor Owen, he expressed to that gentleman his regret that the medical profession, of which Hunter was so bright an ornament, had not yet erected any monument to his memory, and suggested the propriety of one being placed in a vacant niche near Dr. Baillie's, generously offering, should his suggestion be adopted, to forego the fees to which he would have been entitled, and to promote the object as far as he could. The wish thus expressed was immediately responded to by the Council, who have invited the susgeons of the metropolitan hospitals to confer with them on the best means for carrying out the object in question.—*Ibid.*

On the Exhalation of Bicarbonate of Ammonia by the Lungs. By Lewis Thompson, M. R. C. S. &c.—Having lately had occasion to ascertain the amount of moisture given off by the lungs of several healthy individuals during a fixed period, I was induced to examine the nature of the fluid thus condensed.

The result has proved that bicarbonate of ammonia, is constantly exhaled from the lungs, to the extent of rather more than three grains every twenty-four hours for each individual; and although this quantity may appear trifling, yet the amount arising from a large population like that of London is well worthy of notice, and must exceed 150 tons of solid bicarbonate of ammonia per annum; and if, as is extremely probable, other animals also exhale this substance, the atmosphere must not only always contain enough of this agent for the purposes of vegetation, but by a reciprocal action, the mutual increase of vegetables and animals would only tend to render the air better adapted for the due development of both. The existence of ammonia in the breath, may be easily demonstrated by respiring air that has been passed through diluted sulphuric acid, and then expiring it through a tube surrounded by water at 32° F., to the further end of which a vessel is attached to receive the fluid which condenses. On acidulating this fluid with or two drops of pure muriatic acid and evaporating to dryness on a water bath, a residue will be obtained, which, when dissolved in fire or six drops of water, and introduced into a test tube, will give off ammonia on the addition of a strong solution of potash, as evidences by its action on turmeric paper and muriatic acid, or by its peculiar smell. The respiratory process should be continued for an hour or two.

It would be interesting to know whether any difference is observable in the amount of ammonia exhaled by the lungs of individuals,

suffering from disease of the kidneys, diabetes, &c.—*Philosophical Magazine and Journal.*

Disease of the ear causing Death.—Dr. W. W. Merriman at a recent meeting of the Westminister Medical Society described a case of this description that had come under his care. A woman of scrofulous diathesis, aged twenty-six, was seized on January 26th with intense ear-ache, which extended over the whole right side of the head, without any alleviation from remedial means. Conciousness lasted complete until about thirty hours before her disease; but the mid-day preceding, she perfectly understood what Dr. Merriman said to her, put out her tongue, &c., and on the following morning she spoke to her friends; but except these occasions, she was more or less insensible; there were no appearances of convulsions or paralysis, but the jaws became fixed, so that she could scarcely open her mouth. She expired on the evening of February 18th.

On examination after death, a large abscess was found occupying the upper part of the right hemisphere, containing about two ounces of pus. This mostly escaped before removing the skull cap, being so close to the temporal bone at that point; here the dura mater was found dark colored, and separated from the bone, the diseased part being surrounded by a deposit of coagulable lymph on both sides of the dura mater. The mastoid cells of the temporal bone were examined by Mr. Toynbee, and found carious; they were full of a dark-colored pus, epithelial cells, &c. Several apertures existed in the lamina of bone forming the roof of these cells, which was extremely thin. The patient had had the measless when a child, suffered from discharge, at times offensive, from the ear ever since; had complained of headaches for the last year or sixteen months, and had during that time been very forgetful, and at times giddy; she had also fallen away very much. Dr. Merriman, taking these symptoms into account, as also the connexion so frequently found between the abscess within the cranium and carious bone of the base of the skull, was of opinion that the original desease of the ear had been communicated to the brain, causing abscess and death; and thence made some remarks upon the necessity of curing, if possible, the disease in the bones, to prevent the access ofthese more frightful disorders.—*Times.*

Intra-Uterine Dropsy.—At a late meeting of Bath and Bristol Branch of the Provincial Medical and Surgical Association, Mr. King narrated a case of dropsy occurring in a fœtus of eight months. The mother had borne six children, but did not menstruate between her first and fifth pregnancies; was "unwell" once when she became pregnant with this child. Between the fifth and sixth months she became anasarcous, and, at the time of parturition, her abdomen and lower extremities were very large, tense, and hard. Some few days after labour her urine was albuminous. The labour was natural, but the child did not advance, though the pelvis was large, and the head of the child could be freely moved therein. The uterus was excited to action by two doses of ergot, and the child, with some difficulty,

caused by the size of its body, brought down. At birth it measured round the waist sixteen inches and a half.—***Provincial Medical and Surgical Journal.***

Remarks.—We have cited this case on account of its interest in an obstetric point of view; otherwise the absence of any notice of a cadaveric inspection renders it very unsatisfactory. An examination of the thoracic and abdominal viscera, and especially of the heart and kidneys, might have given rise to some important pathological results.—***London Medical Gazette.***

Easy Method of preparing Iodide of Potassium.—M. Pypers subjects to a moderate heat a mixture of 100 parts of iodine, 75 of carbonate of potash, 30 of iron filings, and 120 of water. The mass is to be dried and then heated to redness; the resulting reddish powder is to be treated with water, and the solution obtained filtered and evaporated to dryness. One hundred parts of iodine yield 135 of very white but slightly alkaline iodide of potassium.—***Ibid, from Journ. de Chim. Med.***

Fatal Ether Operations.—The case of lithotomy performed at the Suffolk and Colchester Hospital, proved fatal within twenty-four hours after the operation. We understand, also, that an old gentlemen operated on for some disease of the foot during the last week, by Mr. Travers, died within twenty-four hours of the operation. He never recovered from the stupor caused by the ether.—***Lond. Med. Times.***

At the sitting of the French Institute, M. Boussingault gave the details of a number of experiments he made, to prove that salt used with food does not act by uniting with the alimentary matters, and communicating to them properties that render them fitter for digestion but is simply of use in exciting appetite, and thus provoking the greater consumption of food in a given time.—***Dublin Med. Press.***

Acids contained in Tobacco.—M. Goupil's chemical investigations on this plant have confirmed Vauquelin's assertion of the presence of acid malate of lime in it; but he has gone farther in proving it to be in such quantity as to render tobacco an advantageous source from whence to obtain malic acid for the laboratory. From two and a-half pounds of the dried plant, about two or three ounces of acid malate of ammonia may be obtained. Except citric acid, M. Goupil has not found, in the numerous experiments he has made, any other organic acid. Last year, M. Barrell found, however, a peculiar bibasic acid in tobacco, which he denominated the nicotic acid, composed of C 3, H 4, O 3.—***Ibid, from An. de Chimie.***

Arsenic in Sulphuric Acid.—M. Dupasquier recommends sulphate of barium as a convenient and effectual substance to free sulphuric acid from the arsenic it so frequently contains. M. Erdman says it has been long employed in the Hertz, where the proportion of arsenic is very great, and that the arsenic is rendered perfectly pure.—***Ibid, from Jour. f. Prakt. Chem.***

THE

MEDICAL EXAMINER,

AND

RECORD OF MEDICAL SCIENCE.

NEW SERIES.—No. XXXI.—JULY, 1847.

ORIGINAL COMMUNICATIONS.

Removal of the Parotid Gland, by Professor Pancoast.

Reported by Ellerslie Wallace, M. D., Demonstrator of Anatomy in Jefferson Medical College.

To the Editor of the Medical Examiner.

Dear Sir,—I send you an account of an operation for the extirpation of the parotid gland, performed by Dr. Pancoast, on Saturday June 5th, in the presence of Dr. Sharpless of Downingtown, Pennsylvania, Dr. Dorr of Boston, and Drs. Togno, J. V. Patterson, of this city, and myself, besides Messrs. Banks, Prince, Horner, and several others, students of medicine.

The patient was a Mrs. Twining, from Newport, Bucks county, Pennsylvania, a woman of 60 years of age. According to her statement and that of her friends, the disease commenced upwards of ten years ago as a swelling of the gland, of an acute character, simulating ordinary parotitis. After the acute symptoms had passed away, the gland did not return to its normal size, but remained a little enlarged for a few years. It then began to increase in size, and she applied to Dr. Smith of Newport, who informed her that it was an enlargement of the parotid gland, for which he did not at the time advise any operation. Its

growth increasing more rapidly within the last year, and its increase of growth being accompanied by much distress from severe shooting pains about the face and forehead, she came to Philadelphia to seek surgical aid; and, consulting Dr. Pancoast, gladly consented to an operation in hope of a cure.

The tumour was on the right side of the face, nodulated and irregular in its external aspect, and appearing about half the size of a man's fist. It extended from a little above the zygoma, to a short space below the angle of the jaw—passing forward over the greater part of the masseter muscle, and backward under the ear, so as to elevate and press posteriorly the anterior border of the ear; it likewise nearly surrounded the auditory meatus, and also overlapped the insertion of the sterno-cleido-mastoid. When grasped firmly, it was found but slightly moveable, deeply fixed, and firm in its texture, except at its upper part, where there seemed a local point of softening.

None of the surrounding lymphatic glands seemed at all involved. The complexion of the patient was somewhat straw colored, though she appeared vigorous for her age.

Operation.—The patient was placed on her left side, with the head and shoulders elevated, and her head well turned towards the left shoulder. The tumour was exposed by a single incision shaped somewhat like the Italic *f* reversed: it was commenced above the top of the ear, and carried forward and downward to near the centre of the tumour, then in a direction sloping slightly backwards to just below the lobe of the ear, when it was again directed forward, downward and nearly vertically, leaving a concavity in front, and terminating about an inch and a half below the base of the jaw, and somewhat within the inner edge of the sterno-mastoid. The dissection was then commenced by reverting the flaps so as to expose the tumour, and continued by separating the diseased mass first above, then posteriorly, next anteriorly, and lastly below. Some vessels bled from the surface of the tumour, as well as some small arterial branches from the flap, but by pressure of the fingers and the application of a few ligatures, all material hemorrhage was arrested.

Dr. Pancoast now sought for the external carotid artery, with a view of placing a ligature upon it, near its entrance into the tumour; this required a slight increase in length of the first incision, as from the size and attachments of the tumour, it was somewhat difficult to reach the vessel. It was isolated, however, with its vena comes, and the two were raised on the director, and a Physick's aneurismal needle armed with a ligature passed under them, along the groove in the director, and both secured

in the loop. From this moment to near the conclusion of the operation, there was very trifling hemorrhage. The vessels were now cut beyond the ligature, and while strong traction was made upon the tumour, Dr. P. detached it from its connexions to a still greater distance below. The patient complained much of the pain caused by the upward traction. The tumour was next loosened to a greater extent above, as well as posteriorly and anteriorly.

The central part of the tumour, deeply seated, was the last part detached; and a strong jet of blood, by retrogression from the internal maxillary artery as the final cuts were made, required that a ligature should be applied to the divided vessel. This ligature, with two on smaller bleeding vessels, and the one on the carotid artery, were all that were left at the conclusion of the operation.

A small piece of diseased structure being discovered after the thorough cleansing of the wound, near the bottom of the cavity, it was removed by the handle and blade of the scalpel. As far as was possible, the handle of the scalpel was used during the operation, but for the most part the attachments were so firm as to require the cutting edge. The constant firm traction directed by Dr. Pancoast, was of much value in facilitating and in hastening the extirpation of the diseased mass.

The depth of the wound was very great, as well as its extent. It was six inches in length, exposing the greater part of the masseter muscle, a part of which, being adherent to, was removed with the tumor, and a small portion of the buccinator was also laid bare. The under surface of the internal pterygoid was exposed, as well as the entire ramus of the jaw posterior to the masseter muscle; the ligaments of the temporo-maxillary articulation were also laid bare, on their outer, lower and inner surface, and the condyle could be seen sliding forward in its socket when the mouth was opened. The finger being placed on the styloid process of the temporal bone, (which was exposed its whole length,) and carried downward, the contraction of the styloid muscles could be distinctly felt. A part of one of the styloid muscles, which was embraced by the tumour, was removed with it. The insertion of the sterno-cleido-mastoid into the mastoid process was also plainly shown. There was paralysis of the side of the face and of the orbicularis oculi, induced by the division of the portio dura—this nerve having been removed with the diseased structure. The lips of the wound were approximated by suture, and pressed down into the deep cavity by a compress of lint spread with cerate; another compress was laid over the entire length

of the incision, and strips of adhesive plaster applied to keep the sides of the cavity in contact. The patient was a good deal exhausted at the close of the dressing, and took about ʒj. wine in some water; reaction soon came on, and she pronounced herself comfortable.

Dr. Pancoast invited me to visit the case after the operation and upon no occasion has there been any unpleasant symptom either constitutional or local. Her appetite has been good, she has rested well, had no fever, nor local pain nor soreness enough to induce any complaint. We examined the wound on the fifth day after the operation, and the upper and lower part, for three fourths of an inch, had united by first intention, and so favorable was its appearance, that the centre, where the first compress had been placed, was not disturbed. On the tenth day the first entire dressing was made, and on the twelfth, the second. There had been no discharge of matter, except a little that hardened on the ligatures, and there was scarcely any odour from the wound. Union by first intention has been complete—closely embracing the ligatures, the integuments being sunk down in the deep fossa left by the removal of the diseased gland.

Since the fifth day from the operation, the patient has dressed and set up daily. Very respectfully yours,

ELLERSLIE WALLACE,

June 18, 1847. 309 Walnut Street, Philadelphia

False Anchylosis of the Knee Joint, treated with Steel Springs, &c., &c. By JAMES BRYAN, M. D., Lecturer on Surgery—formerly Professor of Surgery and Medical Jurisprudence in the Academy of Medicine, Vermont.

Mrs. L. aged about 35 years, had been delivered of a (first) healthy child by means of instruments but a few days, when she was attacked with great pain and swelling of the right leg and thigh, exhibiting all the symptoms of *phlegmasia alba dolens*. My friend Dr. Joseph Warrington, who was the attending accoucheur, requested me to see her. The swelling, pain, and heat were very great, and terminated after a protracted course of treatment, during which my friend Dr. Rhea Barton saw the case with me, in incomplete anchylosis of the knee-joint, with great contraction of the flexor muscles of the limb. The heel was drawn up and it was impossible for the patient to bring it to the ground; very little weight could be borne on the toes and ball of the foot, the only parts permitted to touch the floor.

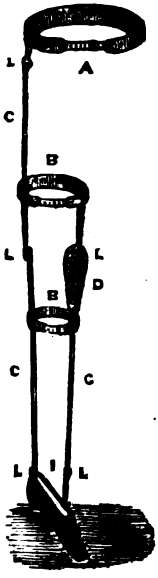
The contraction of the muscles and consequent angularity of

the leg increased daily, so much so that there was a probability of a total loss of its use.

During the treatment of the acute stage of the disease, the severity of the pain, amounting to agony, on the least motion taking place in the excessively tumified limb, induced me, with the assistance of Dr. A. M. Pena, to apply a permanent pasteboard case to the whole limb, leaving the region of the patella only uncovered. This was for the purpose of allowing the application of remedies to the diseased joint. The relief from the general support given by the case, was immediate and complete. She was enabled to rest and to sleep with some degree of comfort. The case was kept in contact with the limb, as the swelling subsided, by gradually tightening the surrounding bandages, and in this way, the patient lying on her back, the extremity was retained in a position not far from rectilinear. Nevertheless, after the subsidence of the inflammation and the removal of the case, as soon as the muscles began to act, the ascendency of the flexors was so great, that the deformity was, as above stated, and continued daily to increase.

At this time, when the general health of the patient was sufficiently restored to require air and exercise, I directed "Mr. B. C. Everett, Principal of the Surgeon's Bandage Institute," to manufacture a steel support for the limb, which would have for its object to throw the greater part of the weight of the body (through the spring) from the foot to the pelvis—or rather from the pelvis to the foot, thus leaving it optional with the patient how much weight she should place upon the foot. It was also to give lateral support to the joints, particularly the knee joint, so that the patient might attempt the use of the leg without bearing much weight upon it, at the same time, by the lateral pressure, the parts should be so supported as to secure them from distortion in any direction. The patient was directed to use frictions with dry salt, salt and water, alternating with animal oils and liniments, such as lard, volatile soap, and camphorated liniments, &c., &c. The limb was to be used gently but firmly and perseveringly, treading of course on the toes and ball of the foot. I strictly forbade her wearing a high-heeled shoe or boot, hoping by the above means to bring down the heel and straighten the knee joint.

At the end of some six months, the strength of the limb had so increased that she could walk upon it with little difficulty, and before a year had passed the instrument was taken off, and her locomotion restored nearly to the natural manner, only a slight shortening of the limb remaining, producing in her walk an almost imperceptible halting. This condition remains to the present time, now almost four years. She is a lady of great activity, and daily takes a large amount of exercise on foot.



The accompanying wood cut represents the in strument used. A, is a circular spring well pad ded, to pass around the pelvis and fasten in front b means of a strap and buckle. L L L, the joint corresponding to those of the hip, knee and ankle C C, the thigh and leg pieces. B B, metallic band and straps for the thigh and leg. I, the shoe an cross piece.

Since writing the above, I have observed in th fourteenth part of "Braithwaite's Retrospect" fo 1847, an article by Anthony Colling Brownless Esq., of London, "On the value of position an mechanical support in the treatment of Disease Joints, with special reference to the knee-joint."

"The subsequent usefulness of diseased joints," remarks the editor of the above very excellen publication, "depends, 1st, upon the position the are allowed to assume during the active stage and 2dly, upon proper support in the convales cent stage, when the activity of the disease bein subdued, the patient is beginning to use the limb."

In reference to the support of the limb, during the active stag of the disease, the following paragraph from Dr. Brownless paper accords with the experience of surgeons.

"During the active progress of the disease, any splint or appa ratus, which will at once maintain the joint in a desirable pos tion, prevent any considerable motion, and be comfortable to th patient, will fulfil all our intentions. Perhaps the strong paste board or undressed leather splint,* adapted to the part whilst we and afterwards softly padded with lint, or, what is better, gold smith's or jeweller's wool, will answer as well as anything else it being light, and at the same time giving good support; bu whatever the apparatus may be, no pains should be spared i fitting it in such a manner to the part, as to be perfectly easy t the patient, at the same time that it gives steadiness to the limb by extending sufficiently above and below the joint.

The limb should lay in a sort of case, which should be lon enough to receive the calf of the leg, and also extend well up th thigh." We concur also in the following:

"By the use, then, of this plan to diseased joints, we obtai more or less the following important ends:—first, the alleviatio of the sufferings of the patient; secondly, the lessening the lia bility to repeated attacks of inflammation, and, consequently

* The leather case is also recommended by Sir B. Brodie. See Disease of Joints.

thirdly, the acceleration of the cure; fourthly, the prevention of deformity, if the disease terminates in anchlyosis, partial or complete; and, fifthly, the ultimate utility of the limb."

But in the "after treatment" my "notions" and apparatus differ very materially from his—after stating the necessity of support to joints thus situated, during the convalescent stage, he proceeds to say:—"I know of no better support for a knee-joint, than to envelope it in splints of leather, undressed with oil, first softened in water and allowed to remain on to harden in the exact shape of the joint, when the edges should be rounded and the splints covered with soft wash leather; a large piece of new jeweller's wool is then to be laid over the patella and upper part of the joints, to prevent too much pressure of the edges; the splints are afterwards to be applied and fixed by a roller of strong stuff attached to the end of one of the splints, and passed round and round the joint." Our idea, as stated above, was to throw, to a certain extent at least, the weight of the body, during locomotion, on the pelvis, and at the same time to give such general support to the limb as would allow the patient to extend it freely, and bear his weight upon it as fast as returning strength would permit. The lateral support to be such as to protect all the joints from deformity.

The last paragraph of the able author, will we think, apply with equal if not greater force to our apparatus, than it does to his plan.

"Besides giving great support to the joints in walking and standing, resisting the tendency to displacement, and consequently, preventing deformity, the leather (spring) apparatus is particularly serviceable in cases of partial anchylosis of the knee joint, more particularly where adhesive bands had been formed, which are liable to be stretched and even torn, and fresh inflammation to be set up from every little slip in walking, if the joint be not guarded by an efficient apparatus. No strapping or rolling can preserve a joint from the effects of these accidents so well as the leather case, (steel springs.) Being firm, it (they) preserves the joint also from external violence, and lastly, I consider this apparatus very valuable, by supplying an immediate, or rather, we may call it, a prophylactic remedy for inflammatory attacks."

In another case of the same disease, occurring in Mr. M. a carpenter, twenty-four years of age, who had had a severe attack of acute inflammation of the synovial membrane, and other tissues of the right knee joint, producing stiffening of the joint and contraction of the flexor muscles; I was enabled to restore the limb by means of a single wooden splint and a bandage. The splint was long enough to reach from the tuberosity of the

ischium to beyond the heel under the leg, and a bandage, the ordinary muslin roller, was carefully applied, from the ankle to the pelvis, around both leg and splint, binding in this way the angular and deformed limb to a horizontal plane. Frictions with various oleaginous mixtures, and cooling lotions were applied, and the bandage tightened daily, until, in about two weeks, the leg was sufficiently extended to permit him to walk upon the ball of the foot. The frictions with the hands and liniments were continued in the day time, and the splint worn at night, until a complete cure was effected. The high heeled shoe was also strictly forbidden in this case.

In these and many other cases which might be mentioned, in which tenotomy was not resorted to, we are of the opinion that much is due to the fact that they were *recent*, and although, as in the case of Mrs. L., the contraction was very considerable, the leg being almost at right angles with the thigh, yet the contractions of the muscles and the deposits in the vicinity of the joints, not having become old and firm, were the more easily extended and broken up. At the same time these cases may be considered useful, as exhibiting how much may be done by the use of merely mechanical means, combined with appropriate frictions.

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Lehrbuch der Arzneimittellehre. Von Dr. C. G. Mitscherlich, Privatdocenten an der Königl. Friedrich-Wilhelms-Universität und praktischem Arzte zu Berlin. 8vo. 2 Band. Berlin, 1838, 1846.

Manual of Materia Medica. By C. G. Mitscherlich, Privatim docens to the Royal Frederick-William's University, and practical Physician at Berlin. Two volumes. Berlin. 1838.

Annuaire de Thérapeutique, de Matière Médicale, de Pharmacie et de Toxicologie pour 1847, *contenant le Resumé des Travaux Thérapeutiques et Toxicologiques publiés en* 1846, *et les Formules des Médicaments nouveaux; suivi d'un Mémoire sur les principaux contrepoisons, et sur la Thérapeutique des empoisonnements et de diverses notices scientifiques.* Par le Dr. A. Bouchardat, Chevalier de la Legion d'Honneur, Agrégé de la Faculté de Médecine de Paris, Pharmacien en chef de l'Hôtel Dieu, &c. 18mo. pp. 302. Paris, 1847.

Our German brethren have a singular mode of bringing out many of their treatises on science, and on medical science more especially. Mitscherlich's work on Materia Medica appeared in its first portion as long ago as the year 1838, and its last has not been long issued. There can, therefore, be but little unity in such productions; and it must often happen, that the purchaser of the first parts must be disappointed in receiving the remainder, and, when he does obtain them, they cannot be in entire keeping with the precursors; as, generally, in the lapse of years, material changes must have occurred in the views of the author, and in the progress of science. In most works of a cyclopædiac character, time—and a long time—must necessarily elapse before they can be concluded, and the same objection holds as to the want of uniformity in the earlier and later articles; but as these are not necessarily—nor perhaps often—by the same author, the objection

is not so valid. In the case of Dr. Copland's valuable dictionary, written wholly by himself, great and deplorable delay has occurred, and—as we have before said—there is no knowing when it will terminate; and if the author's life should unfortunately end, and science be thus deprived of a valued ornament, it may experience the fate of the Cyclopædia of Surgery—dead from inanition—and an imperfect work may be left in the hands of the original purchasers. Such was the case with the *Dictionnaire des Etudes Médicales*, which expired at the termination of the fourth volume, leaving ourselves amongst the bereaved ones.

We wish our German *Confrères* would abandon this custom of issuing their works piecemeal; for it not unfrequently happens, as the *Abtheilungen* are sold separately, that a purchaser is unable to obtain some of them, and is thus saddled with an incomplete work, as has happened to ourselves more than once.

It is not our intention to examine the work of Mitscherlich in detail. In a former article, we spoke of the general character of the German works on Materia Medica and Therapeutics; and commended them for paying much more attention to the therapeutical relations, rather than exhaustiug—as is commonly the case with the English works on the subject—every topic of chemistry and natural history that has any bearing on the matter, and passing over the therapeutical portion in a very cursory and often slovenly manner. Such works are assuredly not desirable as accompaniments to a course of medical lectures. Practical materia medica cannot be completely taught by lectures, although they afford the student most important and essential facilities. An acquaintance with the sensible qualities of drugs can only be attained fully by handling them; but the principles of general therapeutics, and the indications which special articles are capable of fulfilling, can be conveyed by lectures in a manner to render the impression forcible and enduring; and the most valuable accompaniments to the student of materia medica, in the shape of books, are those that teach just so much of the sensible properties of the articles of the materia medica as may enable the practitioner to recognize and select the genuine, and to discard the spurious and imperfect; whilst they expand copiously on the adaptation of such articles to the treatment of disease. It is,

doubtless, *desirable*, that the young graduate should know every thing relating to chemistry and natural history, contained in the pages of Pereira, or Royle, or Ballard and Garrod, or in the Dispensatory of the United States by Messrs. Wood and Bache; but such knowledge, however *desirable*, cannot certainly be *indispensable.* Where, consequently, it is a matter of moment, that the aspirant for medical honours should, at an early period, be sent forth in the practical exercise of his calling, the *necessaries* should be inexorably demanded, but the *luxuries* may be postponed for after attainment.

The appearance of the *Annuaire de Thérapeutique* of M. Bouchardat we have heralded more than once. This is the seventh year of its advent, and we are pleased to learn from its author, that "its success has increased year by year, so that it has now attained a circulation equalled by few works on medicine or pharmacy." "I take to myself"—he adds—"more and more credit for having borrowed of M. Arago the idea of terminating each volume by one or more unpublished works, to which I devote all my attention; and I am of opinion, that these memoirs have contributed much to cause the *Annuaire* to be sought after; so that my publisher has been obliged to reprint three years that were exhausted." p. v.

To such memoirs contained in the present number, we shall restrict our reference at present. The body of the *Annuaire*, like that of Ranking and of Braithwaite, is indeed a kind of Collectanea or Adversaria, similar to the Record department of our own Journal, and therefore does not admit of analysis. Many of the articles have indeed been already published in those *Recueils.*

Our readers are aware, that, according to the views of Liebig, aliments admit of classification into the azoted or nitrogenized, or such as are capable of forming organized tissues; and the non-organized or non-nitrogenized, such as are inservient only to respiration—views, which we have always considered not only to demand proof, but to be, in some respects, unsupported by observation; and to be based rather on chemical than physiological results. From the chemists they have received, however, great attention, and MM. Bouchardat and

Sandras in the '*Annuaires*' for 1843 and 1845, and in the supplement to that of 1846, examined into the digestion of fatty, saccharine and amylaceous substances, and endeavoured to discover the *rôle* of these substances in nutrition; and to complete the inquiry, they have, in the *Annuaire* before us, examined the "Digestion of Alcoholic Drinks;" and after a detail of certain experiments on animals and man, have made the following conclusions:—

"By comparing and associating the results of the experiments which we have just detailed, a clear idea may be formed of the mode of absorption of alcoholic drinks, the changes induced by them in the animal economy, and the *rôle* which they play in nutrition. We may begin by remarking, that for alcoholic drinks the first period of digestion, properly so called, which consists in a solution, is wanting, as it is also wanting in the digestion of fatty bodies. Alcoholic drinks undergo no other alteration in the digestive apparatus than that of being diluted by the gastric juice and mucus, the saliva, and the other fluids that may be poured into the digestive apparatus. The absorption of alcoholic drinks is effected, as Magendie had already shown, by the orifices [?] of the veins. It is especially in the stomach that this absorption takes place, when alcoholic drinks are given either in great excess or mixed with sugar. This absorption may be continued through the remainder of the intestines.

"The chyliferous vessels contribute, in no respect, to the absorption of alcoholic drinks. After they have been taken, the chyle may be very abundantly collected, if they have been given with fatty aliments: in such case the chyle exhibits no appreciable trace of alcohol.

"When alcoholic drinks are introduced into the torrent of the circulation, the alcohol is not eliminated by any of the secretory apparatuses: a small proportion only is evaporated from the lungs, and may be collected with the gases and vapours which are constantly exhaled from that organ.

"If the alcohol is introduced into the circulating apparatus in too great quantity, the arterial blood preserves the colour proper to venous blood; and the alcohol may occasion all the phenomena of asphyxia.

"The alcohol, under the influence of the oxygen incessantly introduced into the economy by respiration, may be immediately converted into water and carbonic acid. But in many of our observations we have obtained an intermedial product of combustion, *acetic acid*.

"The alcohol and the products derived from it disappear

rapidly from the economy: when it is introduced simultaneously with glucose or dextrine, its destruction is more rapid than that of these last bodies." p. 280.

The results, therefore, of the observations of MM. Bouchardat and Sandras do not throw much light on the use of alcoholic agents as elements of combustion or respiration. Of late, it has been urged by Chossat and others, that when animals die of *inanitiation*, the fatal effects are owing to the fatty matters from within and without being consumed, and to the cooling influence thus induced; and it has been conceived that in long protracted fevers, alcoholic stimulants may be serviceable as calorifying agents: and that if they be properly given, they may sustain the 'vital flame' until the malignant disturbing agent or influence has passed away. It may be so: yet we think mischief is often done by over-stimulation in such cases; and the excitant has appeared to us not unfrequently to act most injuriously, by exhausting the slight amount of excitability remaining in the tissues. Life consists in a reciprocal action between special excitants and excitable membrane; and it cannot be too strongly borne in mind, that we may exhaust that excitability by the very agents employed to arouse it; and that life may really be sooner extinguished by the very means we employ to maintain it. As we sooner exhaust the feeble fire by endeavouring to fan it into greater vigour, so may we produce, by excitants, a flickering of the *flamma vitalis*, the *thermum emphytum* or *Biolychnium* prior to its more speedy extinction.

The "notice of the principal counterpoisons and the remarks on the Therapeutics of poisoning by M. Bouchardat" we pass by for the present, as we design to insert it *in toto* in the Record department of our next number.

The Medical Student's Vade Mecum, or Manual of Examinations upon Anatomy, Physiology, Chemistry, Materia Medica, Surgery, Obstetrics, Practice of Medicine, Poisons, &c. Second Edition, revised and greatly enlarged. By GEORGE MENDENHALL, M. D., Lecturer on Pathology in the Medical Institute of Cincinnati, etc. 12mo. pp. 574. Lindsay and Blakiston: Philadelphia, 1847.

We spoke in suitable terms of commendation of this work on the appearance of the first edition, and are glad to find that the

present is even more valuable than the former. About one hundred and fifty pages of matter has been added, embracing some subjects entirely omitted in the first edition, whilst "others have been rendered more full." For the purposes of a medical student, we regard it as decidedly the best manual of examinations in our language.

The Virginia Springs, with their Analysis; and some remarks on their character, together with a Directory for the use of the White Sulphur Water, and an account of the diseases to which it is applicable, etc., and an account of the different Routes to the Springs. By JOHN J. MOORMANN, M.D., Resident physician at the White Sulphur Springs. 12mo. pp. 219 Lindsay & Blakiston: Philadelphia, 1847.

The Sulphur Springs of Virginia are among the most remarkable mineral springs of the country, and indeed of the world Whether we regard the active constituents of the waters which render them medicinal, the mountainous region in which they are situated, and the varied and picturesque scenery along the road which the visiter from almost every quarter travels to arrive at them, we discover hygienic influences of the most powerful character, to impress anew the exhausted energies of the valetudinarian. Besides sulphur and the salts of lime, soda magnesia, iron, &c., present in the waters of most of them, in various proportions, some contain iodine, and various gases, as sulphuretted hydrogen, carbonic acid, etc., and vary in temperature from 49°, as at the "Salt Sulphur," in Monroe, to 106°, at the "Hot Springs," in Bath County.

Dr. Moormann's work, although professedly an account of the different springs of Virginia, is mainly occupied with an account of the "White Sulphur," at which he resides, and a critical notice of a work on "The Mineral Springs of Western Virginia," by William Burke, formerly, and perhaps now, "Proprietor of the Red Sulphur Springs." In this part of the volume, Dr. M commits the common error of all disputants, of supposing that the public take the same interest in personal controversies as the individuals themselves—otherwise, the book contains much to interest the seeker after health, who may be thinking of journey

ing to the mountains and springs of Virginia, and might, we think, with a little effort, and some self-denial, have been made to include much more, even without extending its pages. As it is, however, the physician will find in the analyses of the various Springs information which will enable him to judge of their adaptation to the conditions of patients laboring under derangements for which they are visited, whilst the public will learn from it the different routes and distances to be travelled to arrive at the several Springs.

Water versus Hydropathy; or an Essay on Water and its true relations to Medicine. By EDWARD HARTSHORNE, M. D.

This is a *brochure* of 131 pages, duodecimo, in which the author has attempted to show the general therapeutic properties of cold water, and the classes of cases to which, internally and externally, it is adapted. Although the advocate for a less restricted use of this simple but energetic agent, in the cure of diseases, than the mass of physicians probably are, *at least in practice*, he very justly ridicules the exclusive reliance upon it which characterizes the modern tribe of hydropathists. The book contains many facts and useful suggestions which may not always be present to the mind of the experienced physician, whilst they cannot but be instructive to the tyro; and to the latter, in particular, we commend its perusal, as well for the reasons we have stated, as the example of thoughtful inquiry it exhibits, on the part of one but recently from their ranks.

The Diseases of Females; including those of pregnancy and childbed. By FLEETWOOD CHURCHILL, M. D., author of "the Theory and Practice of Midwifery," etc. etc. Fourth American edition, with illustrations. With notes by ROBERT M. HUSTON, M. D., etc. etc. 8vo. pp. 600. Lea & Blanchard, Philadelphia, 1847.

The appearance of a fourth edition of the work of Dr. Churchill on the Diseases of Females, in so brief a space of time, is high evidence of its general approval by the physicians of the United States.

One great and distinguishing trait of the volume is, that i embraces *all* the diseases peculiar to women, which can hardl be said of any other publication, and it is this circumstance tha especially commends it to practitioners who are without the op portunity of consulting numerous works. In the present edition some additions have been made by the editor, and some error of the press have been corrected, although it is to be regrette that others have been allowed to escape.

THE MEDICAL EXAMINER.

PHILADELPHIA, JULY, 1847.

SHIP FEVER.

In our last we spoke of the vast number of emigrants arriving a the different sea-ports of the United States, in a condition of th utmost destitution, and in many instances laboring under ship-fever This state of things continues, and, in fact, appears to be constantl on the increase; nor does there seem to be any hope that it will b otherwise until the famine in Ireland disappears, or more efficien means are adopted to prevent so many persons from being crowde in the vessels that convey them hither, as well as to provide bette provision for them on the passage.

It is not only in the Atlantic cities that cases of this fever are found but wherever the unfortunate emigrants seek a home speedily afte their arrival on the continent of America, from the Mississippi to th St. Lawrence. As the voyage from Ireland to the Northern ports i much shorter, of course the greatest number proceed thither, and con sequently there the evils most abound. Some idea may be formed o the dreadful mortality among these poor people, who arrive in th St. Lawrence, from the following statement, which we cut from on of the newspapers, and in a smaller proportion, perhaps, among thos who arrive at the ports of the United States:

"*Ship and Typhus Fever.*—A letter from Dr. Douglass at th Quarantine Station, Gross Isle, dated June 18, received in Montrea

gives some idea of the melancholy condition of vessels quarantined there.

The Pursuit, Spencer, from Liverpool—the master, mate, and all the men, save one, sick in hospital—was obliged to send hands from the shore, to remove his sick and dead.

The Lotus, Watson, from Liverpool—has had some of his sick removed to Hospital—expects to land the rest of the sick in a day or two—he had 70 deaths—12 since her arrival.

The Rose, M'Kinlay, from ———, has nearly 100 sick—lost 14 the day of his arrival, and 7 the day after—total deaths nearly 80.

The Lady Flora Hastings, from Cork—passengers landed, except the sick—72—who are still on board—has buried 60.

The ship Sabraon, Wilson, from Liverpool—has about 60 sick—buried 35—has a medical man on board, who attends to the sick.

The Jessie Gorman, from Limerick—sick 45, still on board—mate, and ten of the crew ill—buried 30 of his passengers."

The disease appears to be the old ship, jail or hospital fever, modified in different individuals, so as to constitute either *typhus* or *typhoid* fever, according to the notions of different writers. In all instances it may be regarded as adynamic in its character; sometimes with lesions of the intestinal glands, and in other cases without such lesions, but presenting black tongue, petechiæ, great stupor and prostration, &c. From the number of cases occurring, and the fact that in a few instances the attendants on the sick have contracted and even died of the disease, some alarm has been experienced from the apprehension that it may spread beyond its present limits and become general among the people. We do not, however, participate in this apprehension, nor do we believe that it is entertained by any considerable portion of the physicians of this or any other place where the disease has appeared. That it is contagious, under peculiar circumstances of exposure, and that a few persons have fallen victims to it under such circumstances, may be admitted, and is admitted; but the smallness of the number out of all who have been so situated, shows how rarely it is contracted by those who are not predisposed to it by the melancholy circumstances of the chief sufferers, whilst there are no instances of its occurrence beyond the immediate sphere of infection. These circumstances show no tendency in the disease to spread, and indicate anything but a state of the atmosphere favourable to its propagation. Had the disease appeared among us in cold weather instead of the summer season, its effects upon those who are obliged to attend upon the sick in our almshouses and other places of public charity, would probably have been deplorable.

UNIVERSITY OF PENNSYLVANIA.

Professor Robert Hare, who has occupied the Chair of Chemistry in this time-honoured School of Medicine nearly thirty years, has resigned his professorship, and we understand that at the meeting of the Trustees at which his resignation was accepted, he was unanimously elected Emeritus Professor of Chemistry—a proper acknowledgement of distinguished abilities and long and faithful services. No successor has yet been appointed.

HAMPDEN SYDNEY COLLEGE.

In our last we announced the decease of Dr. Warner, Professor of Surgery in this institution. From the following notice, which we copy from the U. S. Gazette, it will be seen that a successor, of reputation, has already been appointed.

"Dr. James L. Cabell, now Professor of Anatomy and Surgery in the University of Virginia, has been selected, and has consented, to take charge of the professorship in the Richmond Medical College recently made vacant by the death of the late Dr. Augustus L. Warner. Dr. Cabell is now widely known as a medical instructor, and will prove a valuable accession both to the college and the city."

BUFFALO UNIVERSITY.

The first Annual Commencement of the Medical Department of the Buffalo University, took place on the 16th inst. The degree of Docter of Medicine was conferred on seventeen graduates.

LA LANCETTE CANADIENNE.

But a few short months since, we chronicled the advent of this spirited little French organ of medical science, and now, alas! it is numbered with those that have been! The number which appeared on the 15th ultimo, contained the valedictory of its able editor, Dr. Leprohon.

NEW YORK MEDICAL AND SURGICAL REPORTER.

The Boston Medical and Surgical Journal of the 23d ultimo, announces the discontinuance of its weekly contemporary, and takes occasion to say that "the Boston Journal is again alone in this country as a weekly visitant to the medical profession."

Beware, brother Smith! Listen to the Bard—

> "This is the state of man:—to day he puts forth
> The tender leaves of hope, to-morrow blossoms,
> And bears his blushing honours thick upon him;
> The third day comes a frost—a killing frost!"

ARMY SURGEONS.

The Army Medical Board, which was recently convened in New York, for the purpose of examining candidates for appointment to the Medical Staff of the regular army, has approved the following gentlemen as being properly qualified:

Nicholas L. Campbell, New York.
Samuel L. Barbour, Georgia.
George Edward Cooper, Pennsylvania.
Ebenezer Swift, Ohio.
John. S. Battee, Maryland.
Glover Perin, Ohio.
P. G. Stuyvesant Ten Broeck, New York.
John Campbell, New York.
John E. Summers, Virginia.
Charles A. Smith, Virginia.
Washington M. Ryer, New York.

Surgeon John B. Wells was also examined for promotion to that grade, and was fully approved by the same board.

DEATH OF LISFRANC.

The late foreign Journals announce the death, at Paris, of this celebrated surgeon. The following account is from a letter written at Paris by Dr. F. W. Fisher, to his uncle at Boston, and published in the Boston Journal of the 9th of June:

"One of the most noted of the French surgeons has paid his tribute to nature. Lisfranc is dead! After four weeks of suffering from pseudo-membranous croup (*angine couenneuse*) he fell a victim to that relentless malady. He requested that tracheotomy might be performed for his relief; but that operation was objected to, as false membranes were already formed in the pharynx, œsophagus, larynx, bronchi, &c. He was aware of his situation, and said that he would not shrink before death *if his work on operative medicine were completed!* This remark of the dying Lisfranc is characteristic—not of Lisfranc alone, but of the French savans generally. It has often amused me to notice how jealous the French professors are of their scientific brethren, and how anxious they are to obtain professional notoriety. Lisfranc had become an old man, and yet he had all the feelings of youthful ambition. He had served as surgeon in the armies of Napoleon, and had been honorably noticed by that great man, and yet on the day of his death his craving for increased honour and glory seemed to be as imperious as ever. Lisfranc seems to have been a greater favorite with his countrymen than with foreign physicians and students. As a teacher he was much followed, and as a

surgeon he deservedly held a high rank. He was a man of strong and violent prejudices—and never failed in exhibiting them in his lectures, whenever he spoke of those whom he considered as rivals. Dupuytren and Velpeau were the peculiar recipients of his censures —and he oftentimes spoke of these great men with a severity and an eloquence which must have characterized the age of the French revolution. All those who were familiar with the social character of Lisfranc, say that he was a warm-hearted man—that he was ever a friend of the poor, and that his services and his purse were ever at the call of suffering humanity."

This brief description of the able but eccentric Frenchman, is in accordance with a lively sketch of him published in this journal some years ago, from the pen of the then editor, Dr. Clymer, and to which our attention has been directed. Some of our readers may remember having read it at the time, but to most of them the language as well as the facts will be new, and as every one must feel interested in the personal character and peculiarities of one who has occupied so prominent a position in the eyes of the profession, the republication of our predecessor's remarks at the present time will not be deemed out of place.

"Few medical visitors to the French metropolis will readily forget the distinguished surgeon of La Pitié. The position which he has so long occupied as a clinical professor, the great reputation he has so worthily obtained, and the respect with which his professional opinions are received, render him an object of early interest and attention. His lofty stature, stately gait, and robust form; his large and regular features, his deep set, restless and piercing eye, overshadowed by a heavy brow; his ample forehead, with its few grey locks, surmounted by the old cap, and his pale and haggard expression, all make an appearance eminently striking and not easily forgotten. No man has been more misrepresented than M. Lisfranc. An unfortunate temperament has done much toward injuring his prospects; and to disappointment, acting on a natural infirmity of disposition, may, perhaps, be attributed that eccentricity of character and impetuosity of temper which are usually associated with his name. His capacity is undoubtedly of an exalted order; surpassed, if equalled, by that of none of his rivals. A quick and vigorous understanding, a lively imagination, a clear and sure judgment, a varied and solid erudition, a persevering industry, and undaunted professional ardour, are his claims to a reputation laboriously and honestly obtained. With these intellectual powers are unhappily combined an aceticism of temper, a violence of prejudice, an impetuosity of feeling, and a selfish spirit which betray him into the constant indulgence of violent personal invective, to the utter disregard and contempt of the feelings and claims of others. As a lecturer he is full of useful information, which he conveys in a clear, vigorous and energetic style, almost too thea-

trical to be impressive, and often offensive from self-sufficiency and importance. A consciousness of manifest superiority, and a determined inclination to assert and maintain it, lead him to the constant indulgence of his sarcastic humour, and his sallies, indiscriminately directed, are as unmeasured as in general unmerited. Frequently in the midst of a lecture of intense interest he will abruptly stop, his whole frame becoming convulsed, and, without apparent provocation, pour forth, in stentorian voice, a passionate and boisterous philippic on the devoted head of a *confrère*, garnished with admonitory expletives to the neighbouring internes. The fit over, he resumes his discourse, and again interests and delights his class. From his pupils he exacts an entire submission and passive obedience to his whims and caprices, any defection being visited by gross personal abuse, publicly administered. His manner to his patients is usually uncouth and repulsive, he frequently during his morning visits abandoning himself to sudden transports of rage; and in the course of a painful and tedious operation, he commonly exhausts several times his juratory vocabulary. During his life time, Dupuytren was the especial object of Lisfranc's hatred and abuse; since his death he has canonized him and his doctrines, and Velpeau has become the subject of his daily vituperation and invective."

Lisfranc was born the 12th of April, 1787, and died on the 12th of May last. On the 14th his remains were followed to the grave by an immense concourse of physicians and medical students.

RECORD OF MEDICAL SCIENCE.

Report of the Committee appointed under the 6th Resolution, adopted by the National Medical Convention which assembled in New York, in May, 1846.

6th. Resolved,—That it is expedient that the Medical Profession in the United States should be governed by the same code of Medical Ethics, and that a committee of seven be appointed to report a code for that purpose, at a meeting to be held at Philadelphia, on the first Wednesday of May, 1847.

Committee.—Drs. Bell, Hays, and Emerson, Philadelphia; Morris, Dover, Del.; T. G. Dunn, Newport, R. I.; A. Clark, N. Y.; and R. D. Arnold, Savannah, Ga.

The committee appointed under the sixth resolution adopted by the Convention which assembled in New York, in May last, to pre-

pare a Code of Medical Ethics for the government of the medical profession of the United States, respectfully submit the following code.

Chapter I.

Of the Duties of Physicians to their Patients and of the Obligations of Patients to their Physicians.

Art. 1.—*Duties of Physicians to their Patients.*

§ 1. A Physician should not only be ever ready to obey the calls of the sick, but his mind ought also to be imbued with the greatness of his mission, and the responsibility he habitually incurs in its discharge. Those obligations are the more deep and abiding, because there is no tribunal other than his own conscience, to adjudge penalties for carelessness or neglect. Physicians should, therefore, minister to the sick with due impressions of the importance of their office; reflecting that the ease, the health, and the lives of those committed to their charge, depend on their skill, attention and fidelity. They should study, also, in their deportment, so to unite *tenderness* with *steadiness*, and *condescension* with *authority*, as to inspire the minds of their patients with gratitude, respect and confidence.

§ 2.—Every case committed to the charge of a physician should be treated with attention, steadiness and humanity. Reasonable indulgence should be granted to the mental imbecility and caprices of the sick. Secrecy and delicacy, when required by peculiar circumstances, should be strictly observed; and the familiar and confidential intercourse to which the faculty are admitted in their professional visits, should be used with discretion, and with the most scrupulous regard to fidelity and honor. The obligations of secrecy on the part of the physician to his patients, extends beyond the period of his professional services; none of the privacies of personal and domestic life, no infirmity of disposition or flaw of character observed during professional attendance, should ever be divulged by him except when he is compelled to do so by imperative circumstances. The force and necessity of this obligation are indeed so great, that professional men have, under certain circumstances, been protected in their observance of secrecy, by courts of justice.

§ 3.—Frequent visits to the sick are in general requisite, since they enable the physician to arrive at a more perfect knowledge of the disease,—to meet promptly every change which may occur, and also tend to preserve the confidence of the patient. But unnecessary visits are to be avoided, as they give useless anxiety to the patient, tend to diminish the authority of the physician, and expose him to be suspected of interested motives.

§ 4.—A physician should not be forward to make gloomy prognostications; because they savor of empiricism, by magnifying the importance of his services in the treatment or cure of the disease. But he should not fail, on proper occasions, to give to the friends of the patient timely notice of danger, when it really occurs; and even to the patient himself, if absolutely necessary. This office, however, is so peculiarly alarming, when executed by him, that it ought to be

declined whenever it can be assigned to any other person of sufficient judgment and delicacy. For the physician should be the minister of hope and comfort to the sick; that, by such cordials to the drooping spirit, he may smooth the bed of death, revive expiring life, and counteract the depressing influence of those maladies which often disturb the tranquillity of the most resigned in their last moments. The life of a sick person can be shortened not only by acts, but also by the words or the manner of the physician, and that most unintentionally on his part. It is therefore a sacred duty to guard himself carefully in this respect, and to avoid all things which have a tendency to discourage the patient and to depress his spirits.

§5.—A physician ought not to abandon a patient because the case is deemed incurable; for his attendance may continue to be highly useful to the patient, and comforting to the relatives around him, even in the last period of a fatal malady, by obviating despair, by alleviating pain and other symptoms, and by soothing mental anguish. To decline attendance, under such circumstances, would be sacrificing, to fanciful delicacy and mistaken liberality, that moral duty, which is independent of, and far superior to all pecuniary appreciation.

§ 6.—Consultations should be promoted in difficult or protracted cases, as they give rise to confidence, energy, and more enlarged views in practice.

§ 7.—The opportunity which a physician not unfrequently enjoys of promoting and strengthening the good resolutions of his patients, suffering under the consequences of vicious conduct, ought never to be neglected. And his councils, or even remonstrances, will give satisfaction, not disgust, if they be conducted with politeness, and evince a genuine love of virtue, accompanied by a sincere interest in the welfare of the person to whom they are addressed.

Art. II.—*Obligations of Patients to their Physicians.*

§ 1.—The members of the medical profession, upon whom is enjoined the performance of so many important and arduous duties towards the community, and who are required to make so many sacrifices of comfort, ease and health, for the welfare of those who employ them, certainly have a right to require and expect, that their patients should entertain a due sense of the reciprocal duties which they owe to their medical attendants.

§ 2.—The first duty of a patient is, to select no person as his medical adviser, who has not received a regular professional education. In no trade or occupation1 do mankind rely on the skill of a self-taught artist, while in medicine, confessedly the most difficult and intricate of the sciences, the world appears to think that knowledge may be intuitive.

§ 3.—Patients should prefer a physician whose habits of life are regular, and who is not devoted to company, pleasure, or to any pursuit incompatible with his professional obligations. A patient should also confide the care of himself and family as much as possi-

ble to one physician, for a medical man who has become acquainted with the peculiarities of constitution, habits and predispositions of those he attends, is more likely to be successful in his treatment, than one who sees them for the first time. A patient who has thus selected his physician should always apply for advice in what may appear to him trivial cases, for the most fatal results often supervene on the slightest accidents. It is of still more importance that he should apply for assistance in the forming stage of violent diseases; it is to a neglect of this precept that medicine owes much of the uncertainty and imperfection with which it has been reproached.

§ 4.—Patients should faithfully and unreservedly communicate to their physician the history of the cause of their disease. This is the more important, as many diseases of a mental origin simulate those depending on external causes, and yet are only to be cured by ministering to the mind diseased. A patient should never be afraid of thus making his physician his friend and adviser; he should always bear in mind that a medical man is under the strongest obligations of secrecy. Even the female sex should never allow feelings of shame or delicacy to prevent their disclosing the seat, symptoms and causes of complaints peculiar to them. However commendable delicacy of mind may be in the common occurrences of life, its strict observance in medicine may often be attended with the most serious consequences, and a patient sink under a painful and loathsome disease which might have been readily prevented had timely intimation been given to the physician.

§ 5.—A patient should never weary his physician with a tedious detail of events or matters not appertaining to his disease. Even as relates to his actual symptoms, he will convey much more real information by giving clear answers to interrogatories, than by the most minute account of his own framing. Neither should he obtrude the details of his business nor the history of his family concerns.

§ 6.—The obedience of a patient to the prescriptions of his physician should be prompt and implicit. He should never permit his own crude opinions, as to their fitness, to influence his attention to them. A failure in one particular may render an otherwise judicious treatment dangerous, and even fatal. This remark is equally applicable to diet, drink and exercise. As patients become convalescent they are very apt to suppose that the rules prescribed for them may be disregarded, and the consequence but too often, is a relapse. Patients should never allow themselves to be persuaded to take any medicine whatever, that may be recommended to them by the self-constituted doctors and doctresses, who are to be met with in almost every family, and who pretend to possess infallible remedies for the cure of every disease. However simple one of their prescriptions may be, it often happens that they contravene the plan of treatment adopted by the physician.

§ 7.—A patient should, if possible, avoid even the *friendly visits of a physician* who is not attending him—and when he does receive

them, he should never converse with him on the subject of his disease, as an observation may be made, without any intention of interference, which may destroy his confidence in the course he is pursuing, and induce him to neglect the directions prescribed to him. A patient should never send for a consulting physician without the express consent of his own medical attendant. It is of great importance that physicians should act in concert, for although each of their modes of treatment may be attended with equal success when employed singly, yet conjointly they are very likely to be productive of disastrous results.

§ 8. When a patient wishes to dismiss his physician, justice and common courtesy require that he should declare his reasons for so doing.

§ 9. A patient should always send for his physician in the morning, when the first attack of his disease has not been in a subsequent part of the day. By a physician being aware of the visits he has to pay during the day, he is able to apportion his time in such a manner as to prevent a clashing of engagements. A patient should also avoid calling on a medical adviser unnecessarily during the hours devoted to meals or sleep. He should always be in readiness to receive the visits of his physician, as the detention of a few minutes is often of serious inconvenience to him.

§ 10. A patient should, after his recovery, entertain a just and enduring sense of the value of the services rendered him by his physician, for these are of such a character, that no mere pecuniary acknowledgement can repay or cancel them.

Chapter II.

Of the Duties of Physicians to each other and to the Profession at large.

Art. I.—*Duties for the support of professional character.*

§ 1. Every individual, on entering the profession, as he becomes hereby entitled to all its privileges and immunities, incurs an obligation to exert his best abilities to maintain its dignity and honour, to exalt its standing, and extend the bounds of its usefulness. He should therefore observe strictly, such laws as are instituted for the government of its members;—should avoid all contumelious and sarcastic remarks relative to the faculty, as a body, and while, by unwearied diligence, he resorts to every honourable means of enriching the science, he should entertain a due respect for his seniors, who have, by their labours, brought it to the elevated condition in which he finds it.

§ 2. There is no profession, from the members of which greater purity of character, and a higher standard of moral excellence are exacted, than the medical; and to attain such eminence, is a duty every physician owes alike to his profession, and to his patients. It is due to the latter, as without it he cannot command their respect and confidence, and to both, because no scientific attainments can compensate for the want of correct moral principles. It is also incumbent upon

the faculty to be temperate in all things, for the practice of physi requires the unremitting exercise of a clear and vigorous understand ing: and on emergencies, for which no professional man should b unprepared, a steady hand, an acute eye, and an unclouded hea may be essential to the well-being, and even to the life, of a fellow creature.

§ 3. It is derogatory to the dignity of the profession to resort t public advertisements, or private cards or handbills, inviting the atter tion of individuals affected with particular diseases, publicly offerin advice and medicine to the poor gratis, promising radical cures publishing cases and operations in the daily prints, or suffering suc publications to be made, or inviting laymen to be present at opera tions; boasting of cures and remedies; adducing certificates of skil and success, or to any other similar acts. These are the ordinary practices of empirics, and are highly reprehensible in a regular phy sician.

§ 4. Equally derogatory to professional character is it, for a physi cian to hold a patent for any surgical instrument, or medicine; or t dispense a secret *nostrum*, whether it be the composition or exclusiv property of himself, or of others. For, if such nostrum be of rea efficacy, any concealment regarding it is inconsistent with beneficenc and professional liberality; and, if mystery alone give it value and importance, such craft implies either disgraceful ignorance, or fraudu lent avarice. It is also reprehensible for physicians to give certificate attesting the efficacy of patent or secret medicines, or in any way t promote the use of them.

ART. II.—*Professional services of physicians to each other.*

§ 1. All practitioners of medicine, their wives and children, whil under the paternal care, are entitled to the gratuitous services of an one or more of the faculty residing near them, whose assistance ma be desired. A physician afflicted with disease, is usually an incom petent judge of his own case; and the natural anxiety and solicitud which he experiences at the sickness of a wife, a child, or any on who by the ties of consanguinity is rendered peculiarly dear to him tends to obscure his judgment, and produce timidity and irresolution in his practice. Under such circumstances, medical men are pecu liarly dependent upon each other, and kind offices and professiona aid should always be cheerfully and gratuitously afforded. Visit should not be obtruded officiously; as such unasked civility may give rise to embarrassment, or interfere with that choice, on which confidence depends. But, if a distant member of the faculty, whose circumstances are affluent, request attendance, and a pecuniary ac knowledgement be offered, it should not be declined, for no obligation ought to be imposed, which the party would rather compensate than contract.

ART. III.—*Of the duties of physicians as respects vicarious offices.*

§ 1. The affairs of life, the pursuit of health, and the various acci dents and contingencies to which a medical man is peculiarly ex posed, sometimes require him temporarily to withdraw from his

duties to his patients, and to request some of his professional brethren to officiate for him. This is an act of courtesy, and should always be performed with the utmost consideration for the interest and character of the family physician, and when exercised for a short period, all the pecuniary obligations for such service should accrue to him. But if a member of the profession neglect his business in quest of pleasure and amusement, he cannot be considered as entitled to the advantages of the frequent and long-continued exercise of this fraternal courtesy, without awarding to the physician who officiates the fees arising from the discharge of his professional duties.

In obstetrical and important surgical cases, which give rise to unusual fatigue, anxiety and responsibility, it is just that the fees accruing therefrom should be awarded to the physician who officiates.

ART. IV.—*Of the duties of physicians in regard to Consultations.*

§ 1. A regular medical education furnishes the only presumptive evidence of professional abilities and acquirements, and ought to be the only acknowledged right of an individual to the exercise and honours of his profession. Nevertheless, as in consultations the good of the patient is the sole object in view, and is often dependent on personal confidence, no intelligent regular practitioner, who has a license to practice from some medical board of known and acknowledged respectability, recognized by this association, and who is in good moral and professional standing in the place in which he resides, should be fastidiously excluded from fellowship, but his aid should be received in consultation when it is requested by the patient. But no one can be considered as a regular practitioner, or a fit associate in consultation, whose practice is based on an exclusive dogma, to the rejection of the accumulated experience of the profession, and of the aids actually furnished by anatomy, physiology, pathology, and organic chemistry.

§ 2. In consultations no rivalship or jealousy should be indulged: candour, probity, and all due respect should be exercised towards the physician having charge of the case.

§ 3. In consultations it should be the province of the attending physician first to propose the necessary questions to the sick; after which the gentleman called in should have the opportunity to make such farther inquiries of the patient as may be necessary to satisfy him of the true character of the case. Both physicians should then retire to a private place for deliberation; and the physician first in attendance should communicate the directions agreed upon to the patient or attendants, as well as any opinions which it may be thought proper to express. But no statement or discussion of it should take place before the patient or his friends, except in the presence of all the faculty attending, and by their common consent, and no *opinions* or *prognostications* should be delivered, which are not the result of previous deliberation and concurrence.

§ 4. In consultations, the physician in attendance should deliver his opinion first; and when there are several consulting, they should

deliver their opinions in the order in which they have been called i
No decision, however, should restrain the attending physician fro
making such variations in the mode of treatment, as any subseque
unexpected change in the character of the case may demand. B
such variation and the reasons for it ought to be carefully detailed
the next meeting in consultation. The same privilege belongs al
to the consulting physician if he is sent for in an emergency, whe
the regular attendant is out of the way, and similar explanations mu
be made by him, at the next consultation.

§ 5. The utmost punctuality should be observed in the visits of th
faculty when they are to hold consultation together, and this is gen
rally practicable, for society has been considerate enough to allow th
plea of a professional engagement to take precedence of all other
and to be an ample reason for the relinquishment of any present oc
cupation. But as professional engagements may sometimes interfe
and delay one of the parties, the physician who first arrives shoul
wait for his associate a reasonable period, after which the consultatio
should be considered as postponed to a new appointment. If it b
the attending physician who is present, he will of course see th
patient and prescribe; but if it be the consulting one he should retir
except in case of emergency, or when he has been called from a co
siderable distance, in which latter case he may examine the patie
and give his opinion in *writing* and *under seal*, to be delivered to hi
associate on his arrival.

§ 6. In consultations, theoretical discussions should be avoided, a
occasioning perplexity and loss of time. For there may be muc
diversity of opinion concerning speculative points, with perfect agree
ment in those modes of practice which are founded, not on hypothesis
but on experience and observation.

§ 7. All discussions in consultation should be held as secret an
confidential. Neither by words nor manner should any of the partie
to a consultation assert or insinuate, that any part of the treatmen
pursued did not receive his assent. The responsibility must b
equally divided between the physicians, and also the credit of succes
as well as the blame of failure.

§ 8. Should an irreconcilable diversity of opinion occur whe
several individuals are called upon to consult together, the majorit
should be considered as decisive; but if the numbers be equal o
each side, then the decision should rest with the attending physician
It may, moreover, sometimes happen, that two physicians cannc
agree in their views of the nature of a case, and the treatment to b
pursued. This is a circumstance much to be deplored, and shoul
always be avoided if possible, by mutual concessions, as far as the
can be justified by a conscientious regard for the dictates of judgmen
But in the event of its occurrence, a third should, if practicable, b
called to act as umpire, and if circumstances prevent the adoption o
this course, it must be left to the patient, to select the physician i
whom he is most willing to confide. But as every physician relie

upon the rectitude of his judgment, he should, when left in the minority, politely and consistently retire from any further deliberation in the consultation, or a participation in the management of the case.

§ 9.—As circumstances sometimes occur to render a *special consultation* desirable, when the continued attendance of another physician might be objectionable to the patient, the member of the faculty whose assistance is required in such cases, should sedulously guard against all future unsolicited attendance. As such consultations require an extraordinary portion both of time and attention, at leasta double honorarium may be reasonably expected.

§ 10.—A physican who is called upon to consult, should observe the most honorable and scrupulous regard for the character and standing of the practitioner in attendance; his practice, if necessary, should be justified as far as it can be, consistently with a conscientious regard for truth and honesty, and no hint or insinuation should be thrown out, which could impair the confidence reposed in him, or affect his reputation. He should also carefully refrain from any of those extraordinary attentions or assiduities, which are too often practiced by the dishonest for the base purpose of gaining applause, or ingratiating themselves into the favour of families and individuals.

ART. V.—*Duties of Physicians in cases of interference.*

§ 1. Medicine is a liberal profession, and those admitted into its ranks should found their expectations of practice upon the extent of their qualifications, not on intrigue or artifice.

§ 2. A physician, in his intercourse with a patient under the care of another practitioner, should observe the strictest caution and reserve. No meddling inquiries should be made; no disingenuous hints given relative to the nature and treatment of his disorder; nor any course of conduct pursued that may directly or indirectly tend to diminish the trust reposed in the physician employed.

§ 3. The same circumspection and reserve should be observed, when, from motives of business or friendship, a physician is prompted to visit an individual who is under the direction of another practitioner. Indeed, such visits should be avoided, except under peculiar circumstances, and when they are made, no particular inquiries should be instituted relative to the nature of the disease, or the remedies employed, but the topics of conversation should be as foreign to the case as circumstances will admit.

§ 4. A physician ought not to take charge of, or prescribe for a patient who has recently been under the care of another member of the faculty in the same illness, except in cases of sudden emergency, unless it be in consultation with the gentleman previously in attendance, or the latter has relinquished the case, or been regularly notified that his services are no longer desired. Under such circumstances no unjust and illiberal insinuations should be thrown out in relation to the conduct or practice previously pursued, which should be justified as far as candor and regard for truth and probity will permit; for it often happens, that patients become dissatisfied when they do

not experience immediate relief, and, as many diseases are naturally protracted, the want of success, in the first stage of treatment, affords no evidence of a lack of professional knowledge and skill.

§ 5. When a physician is called to an urgent case, because the family attendant is not at hand, the care of the patient ought to be resigned to the latter as soon as his attendance can be obtained, unless assistance in consultation be desired.

§ 6. It often happens, in cases of sudden illness, or of recent accidents and injuries, owing to the alarm and anxiety of friends, that a number of physicians are simultaneously sent for. Under these circumstances courtesy should assign the patient to the first who arrives, who should select from those present any additional assistance that he may deem necessary. In all such cases, however, the individual who officiates, should request the family physician, if there be one to be called, and on his arrival, should resign the case to him, unless his further attendance be requested.

§ 7. If a physician be called to the patient of another practioner in consequence of the sickness or absence of the latter, he ought, on the return or recovery of the former, with the consent of the patient to surrender the case.

§ 8. A physician, when visiting a sick person in the country, may be desired to see a neighbouring patient, who is under the regular direction of another physician, in consequence of some sudden change or aggravation of symptoms. The conduct to be pursued on such an occasion is to give advice adapted to present circumstances; to interfere no farther than is absolutely necessary with the general plan of treatment; to assume no future direction, unless it be expressly desired; and in this case, to request an immediate consultation with the practitioner antecedently employed.

§ 9. A wealthy physician should not give advice *gratis* to the affluent; because it is an injury to his professional brethren. The office of a physician can never be supported as an exclusively beneficent one; and it is defrauding, in some degree, the common fund for its support, when fees are dispensed with, which might justly be claimed.

§ 10. When a physician who has been engaged to attend a case of midwifery is absent, and another is sent for, if delivery is accomplished during the attendance of the latter, he shall be entitled to the fee, but shall resign the patient to the practitioner first engaged.

ART. VI.—*Of difference between Physicians.*

§ 1. A diversity of opinion, and opposition of interest, may in the medical, as in other professions, sometimes occasion controversy and even contention. Whenever such cases unfortunately occur, and cannot be immediately terminated, they should be referred to the arbitration of a sufficient number of physicians, or *a court medical.*

And as peculiar reserve must be maintained by physicians toward the public, in regard to professional matters, and as there exist numerous points in medical ethies and etiquette through which the feelings of medical men may be painfully assailed in their intercours

with each other, and which cannot be understood or appreciated by general society, neither the subject matter of such differences nor the adjudication of the arbitrators should be made public, as such publicity may be personally injurious to the individuals concerned, and can hardly fail to bring discredit on the faculty.

ART. VII.—*Of Pecuniary Acknowledgments.*

§ 1. Some general rules should be adopted by the faculty, in every town or district, relative to the *pecuniary acknowledgments* from their patients; and it should be deemed a point of honour to adhere to this rule with as much steadiness as varying circumstances will admit.

CHAPTER III.

Of the Duties of the Profession to the Public, and of the Obligations of the Public to the Profession.

ART. I.—*Duties of the profession to the public.*

§ 1. As good citizens, it is the duty of physicians to be ever vigilant for the welfare of the community, sustaining its institutions and burdens, and in addition they should be ever ready to give counsel to the public in relation to matters especially appertaining to their profession, as on subjects of medical police, public hygiène, and legal medicine. It is their province to enlighten the public in regard to quarantine regulations, the location, arrangement, and dietaries of hospitals, asylums, schools, prisons, and similar institutions; in relation to medical police of towns, as drainage, ventilation, &c., and in regard to measures for the prevention of epidemic and contagious diseases; and when pestilence prevails, it is their duty to face the danger, and to continue their labours for the alleviation of the suffering, even at the jeopardy of their own lives.

§ 2. Medical men should also be always ready, when called on by the legally constituted authorities, to enlighten coroners' inquests and courts of justice on subjects strictly medical,—such as involve questions relating to sanity, legitimacy, murder by poisons or other violent means, and in regard to the various other subjects embraced in the science of Medical Jurisprudence. But in these cases, and especially where they are required to make a post-mortem examination, it is just, in consequence of the time, labour and skill required, and the responsibility and risk he incurs, that the public should award him a proper gratuity.

§ 3. There is no profession by the members of which eleemosynary services are more liberally dispensed than the medical, but justice requires that some limits should be placed to the demands for them. Poverty, professional brotherhood, and certain public duties, referred to in § 1 of this chapter, should always be recognized claims for gratuitous services; but neither institutions endowed by the public or by rich individuals, societies for mutual benefit, the insurance of lives or for analogous purposes, or any profession or occupation, can be admitted to possess such prerogative. Nor can it be justly expected of physicians to furnish certificates of inability to serve on juries, to per-

form militia duty, or to testify to the state of health of persons wishing to insure their lives, obtain pensions, or the like, without a pecuniary acknowledgment. But to individuals in straitened circumstances professional services should always be cheerfully and freely accorded.

§ 4. It is the duty of physicians, who are frequent witnesses of the enormities committed by quackery, and the injury to health, and even destruction of life caused by the use of quack medicines, to enlighten the public on these subjects, to expose the injuries sustained by the unwary from the devices and pretensions of artful empirics and impostors. Physicians ought to use all the influence which they may possess as professors in Colleges of Pharmacy, and as having the option, in a great measure, of the shops to which they send their prescriptions, to discourage druggists and apothecaries from vending quack or secret medicines, or from being in any way engaged in their manufacture and sale.

ART. II.—*Obligations of the public to physicians.*

§ 1. The benefits accruing to the public directly and indirectly from the active and unwearied beneficence of the profession, are so numerous and important, that physicians are justly entitled to every consideration and respect from the community. The public ought likewise to entertain a just appreciation of medical qualifications;—to make a proper discrimination between true science and the assumptions of ignorance and empiricism—to afford every encouragement and facility for the acquisition of medical education,—and no longer to allow the statute books to exhibit the anomaly of exacting knowledge from physicians, under liability to heavy penalties, and of making them obnoxious to punishment for resorting to the only means of obtaining it.

TO THE MEDICAL CONVENTION ASSEMBLED IN PHILADELPHIA IN THE MONTH OF MAY, 1847.

Report of the Committee on the Organization of the National Medical Association, as ordered by the National Medical Convention held in the city of New York in the month of May, 1846.

The Medical Convention held in the city of New York, in May last, having resolved, "That it is expedient for the Medical Profession of the United States to institute a National Medical Association," and having appointed a committee of seven, consisting of Drs. John Watson, John Stearns, and F. Campbell Stewart, of the city of New York; A. Stillé, of Philadelphia; N. S. Davis, of Binghamton, N. Y.; W. H. Cogswell, of Plainfield, Conn.; and E. D. Fenner, of New Orleans, "To report a plan of organization for such an association, at a meeting to be held in Philadelphia, on the first Wednesday in May, 1847;" the said committee, after carefully deliberating on the business entrusted to them, beg leave respectfully to report.

Plan of Organization for a National Medical Association.

Whereas, the Medical Convention, held in the city of New York in

May, 1846, have declared it expedient "for the Medical Profession of the United States to institute a National Medical Association;" and,

Inasmuch as an institution so conducted as to give frequent, united and emphatic expression to the views and aims of the Medical Profession in this country, must at all times have a beneficial influence, and supply more efficient means than have hitherto been available here, for cultivating and advancing medical knowledge, for elevating the standard of medical education, for promoting the usefulness, honour, and interests of the Medical Profession; for enlightening and directing public opinion in regard to the duties, responsibilites and requirements of medical men, for exciting and encouraging emulation and concert of action in the profession, and for facilitating and fostering friendly intercourse between those who are engaged in it;—therefore,

Be it resolved, in behalf of the Medical Profession of the United States,—that the members of the Medical Convention held in Philadelphia, in May, 1847, and all others who, in pursuit of the objects above mentioned, are to unite with, or succeed them, constitute a National Medical Association;—and that, for the organization and management of the same, they adopt the following

REGULATIONS.

I. TITLE OF THE ASSOCIATION.

This institution shall be known and distinguished by the name and title of "The American Medical Association."

II. MEMBERS.

The members of this institution shall collectively represent and have cognizance of the common interests of the medical profession in every part of the United States; and shall hold their appointment to membership either as delegates from local institutions, as members by invitation, or as permanent members.

The Delegates shall receive the appointment from permanently organized medical societies, medical colleges, hospitals, lunatic asylums, and other permanently organized medical institutions of good standing, in the United States. Each delegate shall hold his appointment for one year, and until another is appointed to succeed him, and shall participate in all the business and affairs of the association.

Each local society shall have the privilege of sending to the association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half of this number. The faculty of every regularly constituted medical college or chartered school of medicine, shall have the privilege of sending two delegates. The professional staff of every chartered or municipal hospital containing a hundred inmates or more, shall have the privilege of sending two delegates; and every other permanently organized medical institution of good standing shall have the privilege of sending one delegate.

The Members by Invitation shall consist of practitioners of reputable standing, from sections of the United States not otherwise represented at the meeting. They shall receive their appointment by invitation of the meeting after an introduction from any of the members present, or from any of the absent permanent members. They shall hold their connection with the association until the close of the annual session at which they are received; and shall be entitled to participate in all its affairs, as in the case of delegates.

The Permanent Members shall consist of all those who have served in the capacity of delegates, and of such other members as may receive the appointment by unanimous vote.

Permanent members shall at all times be entitled to attend the meetings, and participate in the affairs of the association, so long as they shall continue to conform to its regulations; and when not in attendance, they shall be authorized to grant letters of introduction to reputable practitioners of medicine residing in their vicinity, who may wish to participate in the business of the meetings, as provided for members by invitation.

Every member elect, prior to the permanent organization of the annual meeting, or before voting on any question after the meeting has been organized, must sign these regulations, inscribing his name and address in full, specifying in what capacity he attends, and, if a delegate, the title of the institution from which he has received his appointment.

III. MEETINGS.

The regular meetings of the Association shall be held annually and commence on the second Tuesday of May. The place of meeting shall never be the same for any two years in succession, and shall be determined for each next succeeding year by vote of the Association.

IV. OFFICERS.

The officers of the Association shall be a President, four Vice Presidents, two Secretaries, and a Treasurer. They shall be nominated by a special committee of one member from each state represented at the meeting, and shall be elected by vote on a general ticket. Each officer shall hold his appointment for one year, and until another is elected to succeed him.

The President shall preside at the meetings, preserve order and decorum in debate, give a casting vote when necessary, and perform all the other duties that custom and parliamentary usage may require.

The Vice Presidents, when called upon, shall assist the President in the performance of his duties, and, during the absence, or at the request of the president, one of them shall officiate in his place.

The Secretaries shall record the minutes, and authenticate the proceedings, give due notice of the time and place of each next ensuing annual meeting, and serve as members of the Committee on Publication. The Secretary first in nomination shall also preserve the archives and unpublished transactions of the Association.

The Treasurer shall have the immediate charge and management

of the funds and property of the Association. He shall be a member of the Committee on Publication, to which committee he shall give bonds for the safe keeping, and proper use, and disposal of his trust. And through the same committee he shall present his accounts, duly authenticated, at every regular meeting.

V. STANDING COMMITTEES.

The following Standing Committees, each composed of seven members, shall be organized at every annual meeting, for preparing, arranging, and expediting business for each next ensuing year, and for carrying into effect the orders of the Association not otherwise assigned—namely, a Committee on Arrangements, a Committee on Medical Sciences, a Committee on Practical Medicine, a Committee on Surgery, a Committee on Obstetrics, a Committee on Medical Education, a Committee on Medical Literature, and a Committee on Publication.

The Committee on Arrangements shall, if no sufficient reasons prevent, be mainly composed of members residing in the place at which the Association is to hold its next annual meeting; and shall be required to provide suitable accommodations for the meeting, to verify and report upon the credentials of membership, to receive and announce all essays and memoirs voluntarily communicated, either by members of the Association, or by others through them, and to determine the order in which such papers are to be read and considered.

The Committee on Medical Sciences shall prepare an annual report on the progress of Medical Sciences in America, noticing, as occasion may require, the more important improvements and discoveries in Anatomy, Physiology, Hygiène, General Pathology and Therapeutics, Medical Jurisprudence, Materia Medica, and other branches of natural science, bearing directly on the condition and progress of medical knowledge in America, during the year of their service.

The Committee on Practical Medicine shall prepare an annual report on the more important improvements effected in this country in the management of individual diseases; and on the progress of epidemics: referring, as occasion requires, to medical topography, and to the character of prevailing diseases in special localities, or in the United States generally, during the term of their service.

The Committee on Surgery shall prepare an annual report on all the important improvements in the management of surgical diseases effected in America during the year.

The Committee on Obstetrics shall prepare an annual report on all the important improvements in the Obstetric Art, and in the management of diseases peculiar to women and children, effected in America during the year.

The Committee on Medical Education shall prepare an annual report on the general condition of medical education in the United States, in comparison with the state of medical education in other enlightened nations; noticing, as occasion may call for, the courses of instruction, the practical requirements for graduation, the modes

of examination for conferring degrees, and the reputed number o pupils and of graduates at the several medical institutions in th United States, during the year:—noticing also the requirements o the United States Army and Navy Boards of Medical Examiners, th legal requirements exacted of medical practitioners in our sever states, and all such measures, prospective or established, in referenc to medical education and the reputable standing of the profession, a may be deemed worthy of special consideration.

The Committee on Medical Literature shall prepare an annual re port on the general character of the periodical medical publication of the United States, in reference to the more important articles there in presented to the Profession, on original American medical publica tions, on medical compilations and compends by American writers, o American reprints of foreign medical works, and on all such mea sures as may be deemed advisable for encouraging and maintaining national literature of our own.

The Committee on Publication, of which the Secretaries and Trea surer must constitute a part, shall have charge of preparing for the press, and of publishing and distributing such of the proceedings transactions and memoirs of the Association, as may be ordered t be published. The six members of this committee, who have no the immediate management of the funds, shall also in their own names as agents for the Association, hold the bond of the Treasure for the faithful execution of his office, and shall annually audit an authenticate his accounts, and present a statement of the same in th annual report of the committee ; which report shall also specify th character and cost of the publications of the Association during th year, the number of copies still at the disposal of the meeting, the funds on hand for further operations, and the probable amount of the Assessment to be laid on each member of the Association for cover ing its annual expenditures.

VI. FUNDS AND APPROPRIATIONS.

Funds shall be raised by the Association for meeting its curent ex penses and awards from year to year ; but never with the view o creating a permanent income from investments. Funds may be ob tained by an equal assessment of not more than three dollars annually on each of the members ; by individual voluntary contributions fo specific objects ; and by the sale and disposal of publications, or o works prepared for publication.

The funds may be appropriated for defraying the expenses of the annual meetings ; for publishing the proceedings, memoirs, and transactions of the association ; for enabling the standing committees to fulfil their respective duties, conduct their correspondence, and procure the materials necessary for the completion of their stated an nual reports ; for the encouragement of scientific investigations, by prizes and awards of merit ; and for defraying the expenses inciden tal to specific investigations under the instruction of the association, where such investigations have been accompanied with an order on the treasurer to supply the funds necessary for carrying them into effect.

VII. PROVISION FOR AMENDMENTS.

No amendment or alteration shall be made in any of these articles, except at the annual meeting next subsequent to that at which such amendment or alteration may have been proposed; and then only by the voice of three-fourths of all the members in attendance.

And, in acknowledgement of having adopted the foregoing propositions, and of our willingness to abide by them, and use our endeavours to carry into effect the objects of this association, as above set forth,—we have hereunto affixed our names.

NAMES OF MEMBERS. | RESIDENCE. | INSTITUTIONS REPRESENTED.

In connection with the foregoing "Plan of Organization," the committee beg leave further to report the following as one of the ordinances, or by-laws of the proposed association, viz:

THE ORDER OF BUSINESS.

The order of business at the annual meetings of the American Medical Association shall at all times be subject to the vote of three-fourths of all the members in attendance; and until permanently altered, except when for a time suspended, it shall be as follows, viz:

1. The temporary organization of the meeting preparatory to the election of officers.
2. The report of the Committee of Arrangements on the credentials of members; after the latter have registered their names and addresses, and the titles of the institutions which they represent.
3. The calling of the roll.
4. The election of officers.
5. The reading of minutes.
6. The reception of members not present at the opening of the meeting, and the reading of notes from absentees.
7. The reception of members by invitation.
8. The reading and consideration of the stated annual reports from the standing committees.
9. The selection of the next place of annual meeting.
10. The new appointments to fill the standing committees.
11. The choice of permanent members by vote.
12. Resolutions introducing new business, and instructions to the permanent committees.
13. The reading and discussion of voluntary communications introduced through the committee on arrangements.
14. Unfinished and miscellaneous business.
15. Adjournment.

Before bringing this report to a close, the committee beg leave to remark, that in preparing the foregoing "plan of organization," and "ordinance" accompanying it, they have constantly had in view, as worthy of imitation, the plan of organization and order of business adopted without any previous concert of action, by the Medical Convention of 1846.

The plan here presented, differs from the mode of organization

adopted by the late Convention, principally in such points as are necessary to give permanency and influence to the proposed association. It is believed to be sufficiently simple and at the same time sufficiently comprehensive and practicable, for organizing the whole of the Medical Profession of the United States into a permanent body; and for carrying into effect all the objects contemplated in the formation of a National Medical Association.

All of which is respectfully submitted.

JOHN WATSON,
JOHN STEARNS,
F. CAMPBELL STEWART,
ALFRED STILLÉ,
N. S. DAVIS,
E. D. JENNER, (by the Chairman.)

Cases observed by S. HENRY DICKSON, M. D., Prof. Instit. and Pract. Med. Col. State So. Ca.—The habit of keeping a case-book is one which should be recommended to every physician commencing practice. Such a record is advantageous to himself, in a great diversity of modes, and may be made interesting and instructive to others. A *fact* clearly stated can scarcely fail to possess some importance absolute or relative. On looking back upon a collection of professional memoranda, I have thought an occasional extract might, at least entertain, for a moment, the readers of the Southern Journal of Medicine, &c., and offer for publication the following, among the first which presented themselves on turning over the leaves.

1. *Hydrophobia.*—On the 5th February, 1840, I was desired to visit Julius, a black boy, three years of age, belonging to Mrs. M. He had been sick since the evening of the day before; had complained of pain in his head and stomach; had taken a purgative and voided a worm, (*lumbricus.*) His skin was cool; his pulse very frequent; his lips slightly livid; his tongue of natural appearance. His eye was wild; his countenance anxious; and he sighed and sobbed a good deal; he said his head and stomach hurt him, but not much.

Confessing that I did not clearly comprehend the case, I advised that he should be put into the warm bath, and a mustard poultice afterwards applied over the abdomen, and prepared for him a mixture of carb. potass. with tinct. opii. camph. This was in the afternoon.

Next morning, (6th,) his mistress who had attended to him assiduously, mentioned that there was something very peculiar in his manner of taking his medicine, which alarmed her; and stated that he had been, some months before, bitten by a dog. On looking at his arm, we found the scars, four in number, quite noticeable, projecting slightly. His pulse was now feeble, and even more frequent than yesterday; he shewed incessant fear of something undefined, and an anxious desire of change of place, throwing his limbs about carelessly and irregularly, in a manner resembling the movements in chorea;

the skin was cold; the lips livid; the eye staring, and the pupil so widely dilated that the iris seemed a mere ring.

I blew suddenly upon his cheek, and was startled by the horrid convulsion into which he was thrown—indeed, it seemed likely to prove immediately fatal. A few drops of water, sprinkled on him, produced a similar effect. He was dreadfully agitated at the sight of water, and refused to drink anything. His breathing was little more than a mere succession of sobs. He still walked, though with a staggering step and great debility.

A few hours elapsing, he became thirsty, and asked for water, which he grasped at with frantic eagerness, throwing his arms about; he succeeded in swallowing some of it, in spite of the violent spasm brought on by the attempt, menacing prompt suffocation. Indeed, he now seemed more convulsed when a puff of air was blown at him, or a few drops of water sprinkled on him, than when he made the effort to drink. Terror was strongly depicted in his countenance; his muscles were scarcely a moment at rest; he became very loquacious, complaining of headache and great thirst, and often calling for water. He died in the evening, having been ill about fifty-four hours.

A post-mortem examination shewed the membranes of the brain much injected, while the cerebral substance had undergone almost no change in appearance. There was nothing of morbid alteration discoverable in the viscera of the thorax or abdomen. There was well-marked subcutaneous inflammation beneath and around the scars on his arm, left by the bite from which he suffered.

This case is instructive, from the age and condition of the subject. The phenomena were purely physical, and, of necessity, free from any intermixture of imaginative conditions. The dog which inflicted the wounds had not been thought diseased, but was killed on the spot, as a worthless little animal, by his owner, whom he vexed by attacking him also. The wounds were very slight, and healed quickly, having excited no apprehension whatever. The occurrence took place in the September previous—an interval of between four and five months separating the injury from its fatal consequences.

The most impressive symptom here was the super-sensitiveness of the cutaneous surface. This was, in degree, extreme, and singularly characteristic, as it seemed most readily to respond to the impulse of atmospheric air set in motion. A sudden touch would, indeed, startle the patient, and the attempt to swallow would threaten suffocation; but, a puff of breath from the mouth, or the sensation communicated by waving the hand towards him, would bring on spasm and convulsion.

This peculiar symptom presented itself also, very strikingly, in a second case, which I saw some months after, with Dr. Bellinger. His patient, too, was young and unimaginative—a fine, intelligent boy, of about 11 years of age, son of respectable Irish parents. He died in August, having been bitten in April; never suspecting, so far as I am aware, any connection between his attack and the injury re-

ceived so long before. The whole history of this case, indeed strongly resembled that of which I have above given a brief state ment.

2. *Bifid Vagina.*—Mrs. —— came to the city, 1839, to consu me. She has been two years married—has always suffered from i regular and scanty menstruation; it is but a few months since sh has become aware of the existence of some genital malformatio The vagina is divided—neither longitudinally, nor transversely, bu obliquely—by a membranous partition. Both tubes are long an narrow. Coition is difficult, particularly if the right (and somewh anterior) opening be entered. The left, which is obliquely posterio leads to the uterus, the os tincæ presenting; the right conducts t the side of the uterus in which the membraneous partition loses i self; the cul de sac is not to be reached by the finger; a long prob or bougie may pass up six inches or more, but gives pain, and, whe withdrawn, is coated with bloody mucus. The dividing membran lies in loose folds; is smooth and well lubricated; projects slightl between the labia. It possesses very little sensibility.

3. *Obliteration of the Vagina.*—I have seen three instances of thi condition of the female parts. One was in an old African woman who could give no history of the affair at all. She had, strangel enough, a stone in the bladder, the irritation of which gave the firs occasion for discovering the fact. There was a very small opening just sufficient to allow the insertion of a probe, which it was neces sary to introduce frequently, to remove small urinary concretions o calculi, which presented themselves. She was upwards of ninet years old when I first saw her, and lived to be near a hundred—and of course, as she was always relieved by the probe, was not a subjec for lithotomy.

The second was in an old lady, often attacked by suppression o urine, but free from any calculous deposit. The labia had, in thi case, as in the preceding, united so perfectly that there was not lef any trace of a vulva, except a mere elevated ridge—a sort of raphe— in the perineum. The opening which communicated with the blad der only admitted a probe or very small bougie. She had suffere from difficult labor, in which the parts had undergone much injury from unskilful handling, followed by long and severe inflammation.

The third was a most unfortunate instance, resulting, in a beauti ful young married woman, from inflammation of the womb and it appendages, after a protracted first labour. The obstruction her occurred about an inch and a half within the vagina, and was ex ceedingly firm and unyielding to the touch, seeming fibro-cartilagi nous. I advised waiting till menstruation should be attempted, i the hope that the projection of some portion of the obstructing tissu might direct where an opening could be made with safety. But although there are sufficient reasons to believe that the ovaria did not partake in the disorganization and derangement inflicted, ye years have elapsed without any such effort as I have alluded to.— *Southern Journ. of Med. and Pharm.*

Pharmaceutical Notices. By WILLIAM PROCTER, JR.

Donovan's Solution.—The formula for Donovan's solution, as published by its author, and of which a copy is found in the United States Dispensatory, presents so complex an appearance in the way of fractions of a grain, that many apothecaries, not possessed of a delicate balance and weights are deterred from making it.

Another objection is, that a loss of iodine is occasioned by the exposure rendered necessary during the trituration of the three elements with the alcohol during the time that elapses before the combination is effected. The mercury rapidly acquires its dose of iodine, whilst the arsenic, which combines less readily, is liable to all the deficiency occasioned by vaporization. That this occurs is evident from a small quantity of arsenic left undissolved by the distilled water. The proportions in Donovan's formula are 6.08 grains of arsenic, 14.82 grains of mercury, and 49 grains of iodine, which are not exactly in atomic relation. In order that the preparation should be composed of one equivalent of each iodide, the numbers should be 5.5 arsenic, 14.82 mercury, 46.09 iodine, so that there is one-tenth of an equivalent of the arsenical iodide in excess. It is hardly probable that any sensible variation would be observable in the medicinal action of the solution if the iodides were used in equivalent proportion; and as their combining number is the same, the preparation of the solution may be much simplified.

The aggregate of the solid contents of half a pint of Donovan's solution is 70 grains, which is composed of 33⅓ grains of biniodide of mercury and 36⅔ grains of sesqui-iodide of arsenic. If the formula was made to require 35 grains of each iodide, and half a pint of water, it would be greatly simplified, and could be made extemporaneously. The addition of hydriodic acid to the solution is unnecessary in this case, and its design in the formula of Donovan is doubtless to supply any deficiency due to loss of iodine in the operation.

The following formula, closely resembling that of Donovan in the proportions, avoids the fractions of a grain:

Take of Sesqui-iodide of arsenic, 36 grs:
" Biniodide of mercury, 34 "
" Distilled water, half a pint.

Triturate the two iodides with half an ounce of the water until they combine and dissolve, and then add the rest of the water, and filter.

The sesqui-iodide of arsenic is easily prepared. One part of metallic arsenic is reduced to an impalpable powder, intimately mixed with five parts of iodine by trituration, then introduced into a small flask or thin vial, and the mixture very gently heated until liquefaction occurs. The vessel should be nearly full, so as to prevent the formation of much iodine vapour, and enable the operator to bring the fused iodide in contact with all parts of it, and include any iodine that may have sublimed on the sides. If, on cooling, the contents of the vial assume a reddish yellow colour and crystallize on the sides of the vial, and no iodine odour is apparent, the operation is finished. The vessel is then fractured and the iodide removed.

If the arsenic and iodine are pure, and the process skilfully conducted, nearly the whole of the arsenic is combined, and the compound is quite pure enough for making Donovan's solution without sublimation.

The metallic arsenic should be bright and lustrous, and the iodine crystallized and free from water. The ordinary cobalt or fly stone, which is metallic arsenic, is often pure enough for pharmaceutical use.

Atropia.—The activity of good extract of belladonna, leaves little to desire on the part of the practitioner in the internal exhibition of this drug, the dose being quite small, yet in its external application, with a view to the dilatation of the pupil of the eye, or as an application in neuralgia, the extract is so disagreeable an application that several European surgeons have sought to avoid the staining effect on the skin by resorting to the active principle, atropia, in an isolated condition. In the February number of the *Journal de Pharmacie et de Chimie*, it is stated that "among the new remedies employed by M. Berard in the treatment of diseases of the eye, *atropia* should be placed in the first rank. This alkaloid, which can now be obtained from some pharmaceutists, possesses some incontestable advantages in certain cases over belladonna itself.

"The greatest of these advantages is certainly the extreme rapidity with which it affects the dilatation of the pupil even in very minute quantity, as for instance by a solution containing one grain in one hundred grains of distilled water.

"Another advantage appreciated by the patient is the fact that the use of atropia avoids all the smearing and staining of the face, so characteristic of the ordinary mode of applying the extract; and which creates so great a repugnance to its use."

According to the Dublin Quarterly Journal (November, 1845, page 553,) "Dr. Wilde of that city employs the solution of atropia of these strengths:

No. 1. Atropia grs. j. distilled water f.℥j. diluted alcohol gtts. iij.

No. 2. Atropia grs. ij. distilled water f.℥j. diluted alcohol gtts. iij.

No. 3. Atropia grs. iij. distilled water f.℥j. diluted alcohol gtts. iij.

The alkaloid is rendered soluble by a drop of nitric acid, and the spirit is added to make the solution keep.

A single drop of No. 1 placed on the conjuctiva of the lower lid causes dilatation of the pupil in a healthy eye in from five to fifteen minutes."

The best process yet published for atropia is that of Mein, noticed in the United States Dispensatory, and in which the root is the subject of treatment with alcohol, lime, etc. As we cannot get belladonna root here, the only available source is the best extract, which, independent of the large amount of inert matter to get rid of, is too expensive to be employed with that view. Those who incline to make the experiment, however, may proceed by treating the extract with warm water until all the soluble portion is dissolved, filtering out the

chlorophylle and albumen, evaporating the solution to a syrup, dissolving this in alcohol, and filtering, if necessary, and then proceeding as in Mein's process with lime, acid, etc.

Belladonna leaves contain a large quantity of dark colouring matter, which renders the recent juice claret coloured, and is the chief cause of the staining. A solution of extract of belladonna precipitated with subacetate of lead, the excess of lead carefully with sulphuric acid, and the solution filtered from the sulphate of lead, carefully evaporated to four times the weight of the extract, no doubt would answer all the purposes of the solution of atropia.

Syrup of Orange Peel.—Those who are in the habit of preparing the syrup of orange peel according to the United States Pharmacopœia, know that it is strongly disposed to fermentation, and rapidly loses its agreeable qualities in warm weather. When made by the following formula it is more aromatic and preserves readily.

Two ounces of the recently dried peel of the sweet orange is reduced to powder and lixiviated with a mixture of two parts of alcohol and one of water, until six fluid ounces are obtained. This tincture is then poured over and mixed well with 32 ounces (av.) of sugar in coarse powder, and spread on paper until the alcohol has evaporated. When this is accomplished, the aromatized sugar is made into syrup with 16 fluid ounces of water, merely carrying the heat to ebullition in a covered vessel, straining and bottling hot. Prepared in this way, syrup of orange peel has a fine amber colour, and the orange taste in a marked degree.—*Am. Journ. of Pharm.*

A brief notice of a highly Malignant Disease. By B. H. Pearson, M. D., of Powelton, Ga.—Dec. 5, 1846, was called to see Green, a boy about 13 years of age, belonging to the Rev. Mr. ———. On or about the 1st of October he had a slight attack of fever, from which he gradually recovered under domestic prescriptions, so as to be able to resume his work on the plantation. He seemed, however, not to recover strength, but appeared weaker every day, until he finally left off work again, although still not confined to the house. He complained of great prostration and want of appetite. This, his master attributed to his having over-strained himself in carrying home his cotton, being extremely active, and picking more cotton than he could well carry; and for which he prescribed an occasional dose of Cook's pills, and tartar emetic ointment to the spinal column. I found him greatly emaciated; pulse extremely feeble, 175, rather irregular; the sounds of the heart were very weak, yet natural; respiration was feeble; no abnormal sounds; there was slight cough, with frothy expectoration in small quantities; appetite much impaired; bowels a little loose; stools dark; slight tenderness of the lower cervical vertebræ. Prescribe blue mass gr. j. at night, cups over the cervical vertebræ, and an easily assimilating diet.

9th.—Green says he is better, which continued to be his answer, when asked how he was, until the day of his death. A careful ex-

amination showed *slight* dulness under the left clavicle; bowels natural; no other change in the symptoms. Upon enquiry, I find he descended from syphilitic parentage, his grandfather, on his mother's side, having had that disease; and also that most of the male children from the same descent died in infancy. Prescribe hydriodate of potash grs. ijss. three times a-day, which was gradually increased to grs. iv. This was persevered in for about three weeks, when, seeing no improvement, but rather a gradual increase of his cough and his weakness, a resort was had to tonics, quinine, and stimulating expectorants, but with no benefit except relieving his cough a little at night.

Feb. 14th.—A neighbouring physician was called in, who pronounced his disease to depend on torpidity of the nutritive system. Prescribed hydriodate of potash grs. iij. three times a-day, under which prescription he remained until his death, which took place the last of February, being confined to his bed but three or four days before he died. He complained of no pain except a neuralgic affection of his knees for about a fortnight, and soreness of his hips from lying in bed. His bowels remained natural to the last.

Post mortem examination fifteen hours after death. Body extremely emaciated. Upon laying open the cavity of the thorax, the left pleura was found adherent throughout its whole extent; the heart and lung upon this side was perfectly studded with tubercles, of a cheese-like consistency, about the size of small buck-shot; the right lung was tuberculous, but not to the same extent as the left; a few tubercles on the upper surface of the liver, otherwise it was tolerably healthy; the spleen and peritoneum were equally affected; the pancreas, stomach and bowels healthy.

This case is given as an example of several occurring in the same family, four of whom have died, one is now at the point of death, and the disease seems to be extending to other families. I have not had an opportunity of seeing those sick in other families yet, but doubt not from the description of the symptoms that they are affected in the same way.

Thus far every one who has been attacked has died in a time varying from five weeks to four months—their symptoms varying in some particulars. One's bowels were badly affected for several weeks before death. In another, a large vomica bursted, and considérable matter was coughed up on the day preceding her death, which was probably the immediate cause of it. They all seemed to be taken sick by surprise, and died thinking they were getting well, except the mother of the family, who lived but five weeks after she first began to complain, and but two after she first felt sick enough to take to her bed, and she supposed she was "tricked."

Dr. Terrel, of Sparta, recommends the use of iodine to the remaining members of the family, as the only means of preventing the extension of the disease. Possibly it might be of service if used in season. But the probability is, that the disease may be advanced to an incurable state before the first symptoms appear,—and besides it

is so insidious in its approach, that it is some time before the patient knows the nature of the attack. A disease similar to this prevailed some years ago in Maj. ———'s family, of Wilkes county, and between twenty and thirty died. I hear also it is prevailing in Tennessee, to an alarming extent in some neighbourhoods.—*Southern Med. and Surg. Journ.*

Ship Fever.—Both Journals of Medicine and the newspapers, generally, are bringing frightful intelligence of the extension of ship fever in Europe, and all the Atlantic ports, north of Philadelphia, in this country. Vessels are continually arriving here with vast multitudes of miserable human beings, from famine-stricken Ireland, who were both physically and morally enfeebled before commencing a voyage which disease tracks across the ocean with an unerring certainty. Complaints are made that the ship fever is by no means confined to the emigrant vessels, but that it appears on shore, clinging to the Irish emigrant, and breaking him down even far in the country, after he has escaped from the confinement of a ship hold. This is true to a degree; but had these thoughtless, head-strong, imprudent people one ray of discretion when they get on land, their sufferings would be less than they are. Cases of ship fever would be fewer in number, and less severe in character, were the emigrants influenced by the advice urged upon them by kind-hearted, benevolent physicians and others. Soon after leaving the vessel, however good their condition at the time, they seize with ravenous avidity upon every possible variety of edible that comes within their reach, to say nothing of drinks—and the result is a sudden engorgement of the stomach. Nature seeks relief from this plethora, in some instances by a diarrhœa; in others, a peculiar state of the system is induced, remarkable for the turbulence of the blood, which seems to boil and foam in the vessels—and this is ship fever, with all its bad concomitants.

Bad food, and the huddling together of men, women and children in the hold of a ship for weeks, engender the disease which is brought to our shores. When those who have escaped the action of a poisoned atmosphere between decks, afterwards sicken on land, exhibiting the same degree of intensity in the symptoms, the disease is brought on, in a majority of cases, as already remarked, by the uncontrolled appetites of the victims to the malady.

A constant professional intercourse with multitudes of Irish emigrants, who arrive in the port of Boston, furnishes opportunities for witnessing ship fever in all its phases. The only efficient remedy, certainly the first source of relief, is a fresh atmospheric exposure. It is delightful to contemplate the changes effected by this simple process. Very little medication is required in the management of patients from sea. Of the kind of treatment most satisfactory with the other class, those sickening from over-eating, and other irregularities, there may be a variety of opinions. The disease terminates fatally, very quickly, at sea; but the worst forms, on being removed

to cool, airy apartments on shore, are at once ameliorated, unless the low, muttering delirium exists. Under such circumstances, a recovery is exceedingly doubtful. Petæchial spots, referred to by foreign authors, have in no instance, thus far, been observed on those dying here.

Next—is the disease infectious? Does it re-produce itself in persons exposed to the emanations from those labouring under it? These are questions seriously agitated by the mass of the people. Many persons consider that it is not thus propagated, but that it is only generated in the manner represented in these observations. Fatigue, debility, a tainted atmosphere, or badly-ventilated apartments, together with direct exposure to those in the advanced stages of the fever, without doubt, may produce it. Hence, cases are perpetually occurring in public institutions, where foreign paupers are admitted, and in narrow streets, and old decaying tenements where emigrants congregate on reaching the city. The views of correspondents on this engrossing topic are solicited, since the public health should not be neglected by medical practitioners.—*Boston Med. and Surg. Journ.*

A few Remarks on Phthisis, and on its Physiological Treatment. By M. Bouchardat. Translated for the Medical Times by Alfred Markwick, Esq., Surgeon to the Western German Dispensary, and formerly Externe to the Venereal Hospital, Paris, &c.—The anatomical doctrine which prevails at the present day has, in more than one instance, substituted facts for errors; it has, in more than one disease, replaced bad therapeutics by a rational and efficacious mode of treatment, and has more than once, by pointing out to us the fallacy of science being already perfected, contributed to delay the period of useful and fruitful research. In pulmonary phthisis, in particular, the true nature of the disease consists, in the opinion of all our anatomico-pathological writers, in the specific alteration of the lungs; and it may be observed from its commencement, and followed throughout all its stages. This opinion being adopted, the origin of the disease is considered to be a specific irritation of the organ; and upon this supposition, medical men direct their treatment against the local affection, and torment their patients by the local application of leeches, cauteries, and moxas!

This opinion on the nature of pulmonary consumption is one of the worst that can be formed; the reality is not sought for, but a vain fancy followed, and the disease itself allowed to increase daily in severity, and at length to become incurable, without any useful means being resorted to oppose it.

I am about to defend an opinion which is to lead to quite a different mode of treatment, but which will often present, in its application, numerous difficulties, and require special researches to be made.

According to a careful microscopical examination, and a complete chemical analysis, the results of which I intend to publish elsewhere, it appears that tubercule is formed by the reunion of *particula*

globules which have no existence in the animal economy in the healthy state. These particular globules become developed spontaneously in the bodies of animals that are placed under certain circumstances which will presently be more particularly alluded to. These globules unite and coalesce, and become destroyed by giving rise to secondary products, and to fresh organized globules; they invade every organ, but more particularly the more susceptible ones—those, in fact, of the most *delicate* structure, such, for instance, as the lungs.

If this opinion be admitted *à priori*, and its value is proved by subsequent experience, we are then naturally led to inquire after the cause or causes which place the animal economy in such a condition that the tubercular globule becomes spontaneously developed. If we are fortunate enough to discover the cause or causes, then all doubts as to the treatment ceases; it becomes then truly physiological.

The majority of those physicians who at the present day adopt an opinion analogous to the one I have just expressed on the nature of the tubercular affection will reply without hesitation. But the true cause of the disease is a particular *diathesis;* and to them, this word diathesis is something mysterious—something inaccessible to our researches. This habit of being contented with words is but too common in pathology, and is almost as dangerous as being in error.

If we apply this method to the study of phthisis, we at once find that the tubercular globule becomes developed in individuals that are reduced either by bad nourishment, or by the excessive, continued, and unrepaired loss of some fluid essential to the animal economy, such as the lymph and serum, from too abundant suppurations, or the spermatic fluid from venereal excesses, &c.

It will be perceived that the causes of debility which may bring about the spontaneous evolution of the tubercular globule are both complex and numerous. I shall not now attempt to touch upon all parts of this problem, which, indeed, is beyond my capabilities; but shall merely take a case that has fallen under my own observation, and follow, with regard to it, the plan I have described; the case in question is one of tubercular affection occurring in a diabetic patient.

On the connection which exists between Diabetes and the Tubercular Disease.

In all my writings on diabetes, I have alluded to the tubercular complication which has been very justly insisted on by several authors. In all the diabetic patients comprised in the first series of cases, on whom a *post-mortem* examination was made, and who did not die from any intercurrent accident, tubercles were found in the lungs.

I am convinced that many tubercular affections have originated in slight attact of diabetes which has been overlooked, and I cannot too strongly recommend medical men to carefully examine the urine of patients threatened with phthisis. By adhering to the rules I laid

down when speaking of "the means of detecting the presence of starch sugar in urine, and of measuring its quantity;" it is possible in many cases to ward off or arrest an affection which is so difficult to be overcome when once it has manifested itself. I will not quit this interesting subject, of the affinity between diabetes and the tubercular disease, without making a few remarks, the truth of which must eventually be proved in practice.

In the majority of cases, the truly positive ætiology of pulmonary phthisis is still enveloped in great obscurity. Of late years some very exact researches have been made which have been the means of proving, with great certainty, the existence of tubercles when they are present in the lungs. The Parisian school has brought the methods of percussion and auscultation to the utmost perfection. One may almost foretel the alterations that will be found on *post-mortem* examination. This part of the science, the results of which act on the minds of students, has been cultivated with so much spirit that *physiological ætiology*, which alone can lead to a rational and really effectual mode of treatment, has, in consequence, been perhaps a little too much neglected. It is, no doubt, useful to be able to detect, either by the aid of instruments or by our own improved senses, those lesions which would escape a less practised ear; still it is of far greater importance to prevent them, and to stop, if possible, their progress.

The excellent understanding of a great number of celebrated physicians of our time has led them to abandon the uncertain doctrines of our predecessors, and to introduce into medicine the positive methods of the other sciences of observation. Great perseverance has been employed, not only to determine the physical alterations of the diseased organs or tissues, but also to find out the nature of these hidden alterations by means of a strict diagnosis; but, being unable to introduce into the research after the *true* causes this precision, the study of the nature of diseases has been repeatedly declared of but little importance, and those investigations which, in my opinion, can alone lead to a satisfactory mode of treatment, have been neglected. I am aware that these investigations are difficult, and that more than one false step has been made in this direction; but within the last fifty years sufficient progress has been made in both physics and chemistry to enable us to foresee the time when we shall be able to unravel the mysteries of many of the organic phenomena which have hitherto been considered as unfathomable. Medicine will never assume a truly scientific and exact character until, aided by physics and chemistry, it possesses positive data respecting the nature of diseases.

We will now attempt to handle the very difficult question of the physiological ætiology of the tubercular affection, and will proceed, as in the exact sciences, from the known to the unknown. We commence with the following principle, which may be considered as a law of pathology, viz:—

"When a patient, labouring under diabetes dies slowly from the constant progress of the disease without the occurrence of any other accident, tubercles are invariably found in the lungs after death."

Here, then, are individuals with sound lungs, in whom the development of tubercles may be foretold. Therefore, as we now know the nature of diabetes, we may, for this particular case, arrive at a positive ætiology of the tubercular affection.

In what does a diabetic patient chiefly differ from a man in health? More particularly in this, that in the healthy person, the feculent food dissolved in the digestive apparatus, and carried slowly into the circulation, is there completely consumed, no trace of it being afterwards found either in the fæces or in the urine; whereas, in the diabetic, the feculents, rapidly converted into glucose in the stomach, are immediately absorbed; and this glucose, being in too large a proportion in the circulating apparatus to be normally destroyed, becomes eliminated by the kidneys. Hence there are three important circumstances which distinguish the diabetic from the healthy individual, viz.:—1, the perversion of the functions of the stomach, causing a rapid solution of the feculents; 2, the existence of a large quantity of glucose in the blood; 3, great activity of the secreting organs of the urine to get rid of the glucose. Important consequences proceed from these differences.

The active powers of the digestive organs, and the secreting apparatus of the urine, are uselessly employed for the support and repair of the animal economy. The nature of the transformations which the nutritive fluid is continually undergoing is modified by the presence of a considerable proportion of glucose in the blood. The food dissolved in the digestive apparatus being no longer usefully employed, the patient is supported at the expense of himself; hence the emaciation and wasting, with all its results. Now, the necessary effect of this anomalous condition is the spontaneous production, and the localization in the lungs, of tubercular globules, which eventually, by their successive agglomeration, invade this organ and prevent its important functions.

The causes of the spontaneous evolution of tubercles for this particular condition are thus clearly established:—

1. Perversion in the digestion of feculents.
2. Presence in the blood of a variable proportion of glucose.
3. Elimination of the glucose by the kidneys.
4. Replacing the glucose eliminated, by the slow destruction of the fundamental principles of the blood, the muscles, and the other organs.

May not analogous circumstances be met with in the different conditions under which tubercles become developed in the lungs or in other organs?

Apart from these cases, in which tubercles are developed as the result of the perversion in the digestion of feculents, can we not easily understand that other perversions in the important function of nutrition may cause the development of the tubercular affection? I hope, when our great work on digestion is completed, to be able to return to the nature of these perversions, which may be suspected after what we have published. I think, therefore, it would be of the greatest

importance to make some careful and accurate investigations into th manner in which the digestion and the assimilation of the differen aliments takes place in persons in whom phthisis has just commence or who are threatened with this disease. We should then establis an equation, as I have done with respect to diabetes; the food an drink would form its first term, and the principles contained in th fæces, the urine, and the other products of secretion or otherwise, th nature and quantity of which could be appreciated, the second. Thes investigations would lead to results equally precise with those I hav obtained in diabetes. We may resume the contents of this paper i the following propositions:—

1. The cause of the development of tubercles in the lungs of dia betes is a defect in nutrition and assimilation.

2. The tubercular affection has its origin, much more frequentl than is imagined, in a defect in nutrition and assimilation, which can not be known, and which can only be remedied by establishing a exact balance between the *ingesta* and the *excreta*.

3. It likewise originates in the excessive, continued, and unre strained losses of fluids that are essential to the economy.

4. When a patient becomes emaciated it is important to ascertai as soon as possible the cause of the emaciation, and to remedy it; w should thus alter the conditions which give rise to the spontaneou evolution of the tubercular globules.—*Lond. Med. Times.*

A case of Enlargement of the Thyroid Gland, treated by Seton By Henry Kennedy, M. D.—In November, 1845, a woman, age 35, applied to me on account of an enlarged thyroid gland. She ha been married nine years, and had four children: she has lived of lat years in Dublin, and has always been healthy in every respect, ex cepting the disease she applied about. The gland had begun to en large so far back as the year 1832, thirteen years before my seein her. At first it had increased very slowly; but the last year or so she said, it grew more rapidly. When I saw it the tumour was a least the size of the largest orange; it was very hard to the touch, a if it were solid, but was divided into two portions, of which that on th right side was much the largest; it did not vary in size at the men strual periods. It was not, however, on account of the bulk of th tumour, for in that respect there was nothing remarkable, that th patient applied for relief, but because it had affected her swallowin from a very early stage of its growth; and this symptom had latterl become much more distressing: solids were more difficult to get dow than fluids, as might be expected. She referred the obstruction t the seat of the tumour. She told me she had shown it to other medi cal men, but she considered it still increasing. I ascertained tha iodine had lately been used, both internally and externally for som weeks.

Under all the circumstances of the case, the tumour and dysphagi on the increase, and iodine having got a full trial, I determined o some more decided line of treatment, the more readily as the patien

herself was most anxious that something should be done. The plan by seton seemed to hold out the best prospect of success, and it was carried into effect, having previously brought the health to the best condition. The first seton was passed on the 30th of November, 1845. A common curved needle of the largest size, with its eye nearly full of double silk thread, was passed from below directly upwards, through the anterior portion of the tumour, about half an inch from the middle line of the neck, and including a space of at least one inch and a quarter between the entrance and exit of the seton. This was then fixed so as to prevent its slipping out, and the patient was desired to keep a poultice constantly applied, and also to keep her bed for two days; no unpleasant effects followed. It is enough to state here that this first seton was withdrawn at the end of ten days; that at the end of a fortnight a second one was passed; that it was double the size of the first, and its introduction was followed by a very considerable degree of constitutional irritation, which, however, subsided in about four days; suppuration then became very fully established, and the seton was withdraw, after being in twelve days. With the exception of poulticing, nothing was done during the next four months. In this time considerable changes had taken place in all the anterior portion of the tumour, and that part of it which occupied the left side; it had become very hard, and gradually, but steadily diminished in size. The larger portion of the tumour, however, occupying the right side of the neck, remained stationary. It appeared, indeed, as if it had grown somewhat larger; but this was not certain. A third and last seton was passed through this portion of the tumour in the month of April, 1846; its direction was upwards and outwards, so as to take in the longer axis of the swelling. This seton was four times larger than the previous one; it was passed with a large packing-needle, with the edges and point properly ground. After sixteen days the seton was withdrawn, the suppuration being then very considerable. Finally, after four months more, the entire tumour had so much lessened, that it might be considered as cured. The entire process occupied between eight and nine months.

At the present time (January, 1847) the eye cannot detect any tumour, but to the touch one remains, which is probably the size of a small chestnut. There is no deformity whatever, and very trifling marks of where the setons had been passed. The patient, too, feels no difficulty of swallowing, at least none that causes any inconvenience.

As I wish here to confine myself merely to the facts of this case, I have purposely omitted the consideration of several points which might fairly admit of discussion; such as the nature of the tumour; the question of a more general use of this plan, after the more ordinary means have failed, particularly iodine; the nature of the dysphagia, as to whether it was nervous or mechanical; the causes of those enlargements, and other points connected with the subject in a general way. It is to Quadri, of Naples, that we are indebted for the plan of treatment put in force in the present case. Not being certain

of what the result of the treatment would here be, I did not take the precaution of getting a cast of the tumour when it was of large size. This, probably, is of less consequence, as the patient has been seen by several gentlemen to whom I may here refer. Dr. Clarke, of Herbert street, saw her repeatedly; he took much interest in the case, and kindly gave me his assistance. At a late stage, and after all the setons were withdrawn, the patient was seen by several physicians and surgeons of this city.—*Dub. Quar. Journ.*

Case of Softening of the Heart in a Person who was believed to have died of Starvation and Exhaustion. By B. G. Darley, M. D. Coolock.—On the 4th of January, 1847, I was requested by the coroner to examine the body of an elderly female, who was reported to have died of want and starvation in this neighborhood. The history of the case was shortly this: she was a poor woman, who obtained her living by wandering about from place to place, and was in the habit occasionally of stopping a day or two in the house in which she died. She had come there three days before the above date, and complained of much weakness, and was suffering, as the people in the cabin said, from "a kind of asthma." She had some tea to drink, but eat nothing. She died on the 3rd instant, apparently from exhaustion. On opening the chest, the lungs appeared healthy, and collapsed slightly; there was no water in the pericardium, the heart was larger than natural, the auricles greatly distended and full of blood. On lifting up the apex to see the size of the heart, my fingers went through the substance of the left auricle, and this with a very slight pressure indeed; out of the rent made by my finger poured a great quantity of fluid blood which filled the pericardium; the right auricle was in the same condition, literally choked with fluid blood, and in this auricle it was of a very dark colour; but the most remarkable character was the softened state of the walls of both auricles, particularly the left; they were of the same colour and as friable as the liver, and not unlike portions of lung affected with pulmonary apoplexy. The increase size of the heart appeared chiefly made up by the great dilatation and distention of the auricles; the ventricals did not appear larger than natural; they were empty of blood, and their muscular structure was of a pale colour.

The viscera of the abdomen were generally healthy; the stomach was contracted, and nothing in it but a half pint of a dark colored fluid; the intestines in parts were occupied by the same. The omentum was destitute of fat; indeed the absence of adipose tissue throughout the whole body was remarkable.

The brain was examined, and was perfectly healthy, but particularly bloodless.

Now what was the cause of death in this case? There was no lesion of the brains, lungs, or viscera of the abdomen, and though the heart was as described, it had preserved its integrity, at least there was no solution of continuity within its walls; and this might readily have taken place, considering the softened state of the auricu-

lar tissue, had the individual lived a little longer, and the auricles had power to act on their contents; in such case death, most probably, should have been laid to the door of a diseased heart, and not as, in my opinion, the result of an altered state of the contained blood.

The coroner's jury returned a verdict, that "death was caused by want and destitution."

In a physiological point of view, I should say that insufficiency of nutritious food rendered the heart unable to expel its contents, its muscular structure, particularly that of its auricular portions, was so softened and weakened as to allow of dilatation to the greatest possible amount; the blood gradually accumulating, congestion took place, and the woman died of what we may call congestive apoplexy of the auricles of the heart. The manner this is caused by starvation is thus: the blood is rendered thin, has little or no fibrin in it; the heart, along with the general muscular system, is weakened, and unable to expel its contents; congestion takes place; its cavities, particularly the auricles, yield to pressure; and, as is the case in all muscular cavities when distended beyond a certain extent, atony supervenes, the muscular fibres no longer contract, and death is the result.

From this examination, the difficulty of breathing during life may be explained, and, had an opportunity been afforded before death, we should probably have found the pulse slow and intermitting.

This case differs from the fatty degenerations of the heart in many particulars. First, this, as we have seen, engages the auricular portions of the heart, while it is the ventricles that are generally occupied by fatty deposition; again, it is in the corpulent and the full habit that the heart is predisposed to the fatty degeneration, whilst the softened auricle will be found in the ill-fed and destitute; again, the mode of death in the former has more of an apoplectic character, whilst in the latter the spark of life ebbs out from want of sustenance and vital power. In the fatty heart, the solids are the first to suffer, whilst in the other the mischief begins in impoverishment of the fluids.

As I fear the profession in this country will have many opportunities of examining the bodies of individuals dying under similar circumstances, though the case above noticed might have occurred at any period, I think it might be interesting for medical men to give reports of their examinations, and to observe the state of the several viscera, and especially the heart, in such cases.—*Ibid.*

A Case of profuse Hæmaturia, the result of Injury, treated successfully with Gallic Acid. By James S. Hughes, F. R. C. S., Surgeon to Jervis-Street Hospital.—John Hyland, aged 30, a Custom House porter, admitted into hospital on September 8th, 1846; states that, about half an hour before admission, he was employed in lowering a cask full of sugar, when he was struck by the handle of the windlass with great violence in the left lumbar region; he was rendered insensible for a short time, and was carried into the hospital. On examination an extensive ecchymosis was found to exist along the left

side of the spinal column and lumbar region: the ninth, tenth, and eleventh ribs were fractured close to the vertebræ; there was excruciating pain on pressure over the region of the kidney; abdomen tympanitic; testicles retracted; countenance deadly pale, covered with cold perspiration, and highly expressive of pain; pulse quick and feeble. Soon after admission he expressed a desire to make water, and expelled, with much difficulty, more than half a pint of pure blood. Ordered six leeches to the seat of pain, and to have a draught containing acetate of lead and acetum opii every second hour.

9th. Slept very badly; pain in the left lumbar region intense; much increased by the slightest pressure: urine highly loaded with blood; finds considerable difficulty in emptying his bladder; bowels freed during the night; the leeches were repeated, and the draughts continued.

10th. Pain somewhat relieved by the leeches; made several attempts to pass his urine during the night, but could not do so; constant desire to pass water; bladder distended. A gum elastic catheter having been passed into the bladder, a considerable quantity of blood and urine were drawn off; there were several long clots of blood discharged. My colleague, Doctor Neligan, having suggested to me a trial of gallic acid, I was induced to order it in the form of pills, with extract of gentian, two grains and a half of the acid in each pill, which were taken at intervals of three hours.

11th. Considerably improved; the quantity of blood in the urine much diminished; after the third pill, the presence of gallic acid in the urine was detected by the addition of a few drops of tinctura ferri, sesq. chlorid., which converted it into a perfect ink. The pills were repeated.

12th. Passed a good night; made water freely; urine limpid, quite devoid of blood; pain in the lumbar region considerably decreased; pulse sixty-four, soft. Discharged cured on the 18th.

Gallic acid has proved a most useful addition to our list of astringents. Both as an external and an internal remedy in hæmorrhages its character stands high, and justly so; it is now generally alleged to be the active principle in Ruspini's celebrated Styptic, which Dr. Thompson is of opinion consists of gallic acid, sulphate of zinc, opium, alcohol, and rose water; the gallic acid evidently being the active ingredient. Sometime since I saw the power of Ruspini's Styptic put to the test in the case of a gentleman who had some of the branches of the palmar arch of arteries opened by the bursting of a bottle of soda water; profuse hæmorrhage having ensued, and attempts to secure the bleeding vessels having been tried in vain, graduated pressure was applied, but to such an extent, and for such a length of time, that sloughing of the palm of the hand ensued, with inflammation extending up the forearm, and considerable fever, together with repeated periodical hæmorrhages, by which the patient was considerably reduced: at this stage I saw the case in consultation, when it was agreed to give a trial to this powerful styptic, and a single application of it was followed by an immediate arrest of the hæmorrhage,

and recovery. As a local application in aphthous ulceration of the mouth and tongue, I can speak highly of gallic acid; it is also a valuable injection in the gleety stage of gonorrhœa. As an internal remedy, gallic acid has been used with great success by Dr. Simpson and others in certain forms of uterine hæmorrhage, and with this advantage over most other anti-hæmorrhagic medicines, that it had no constipating effect on the bowels; but as gallic acid passes directly to the kidneys, acting thereby as a direct astringent, the urine becoming impregnated with it very soon after its exhibition, it consequently is an astringent peculiarly suited to hæmorrhages from the urinary organs, and as such has been strongly recommended by Drs. Steevenson, Golding Bird, and others. Dr. Steevenson has published in the Edinburgh Medical and Surgical Journal, the following case of obstinate hæmaturia, successfully treated by gallic acid. The patient was a boy fourteen years of age, who had been passing blood with his urine for several months, supposed to have been caused by a blow which he had received in the lower abdomen from one of his school-fellows. After ineffectual attempts to arrest the discharge of blood, three grains of gallic acid were given every three hours for four days, when the discharge subsided, and did not return. In the case which I have brought forward, we found that the large doses of acetate of lead, combined with opium, did not check the hæmorrhage; whereas the bleeding ceased altogether after the exhibtion of the third dose of the gallic acid, at which time the presence of the acid in the urine was proved by the addition of the tinct. ferri sesq. chlorid. —*Ibid.*

Source of the Catamenial Discharge.—By George King, M. D.—The physiology of the source of the catamenial discharge, so peculiar to the human female, and the functions of the interior of the uterus positively ascertained, are subjects comparatively of very recent discovery, and as the opportunities are so rare of our having proof or of our obtaining any decisive means of determining the matter or establishing the fact that the uterus is the source of this healthy and proper sexual secretion, I think the following evidence may be interesting to the readers of the *Provincial Medical and Surgical Journal.* Should you be of that opinion perhaps you will find room for it in an early number:—

On Saturday, the 27th ult., I was applied to by a medical friend to assist him at a *post-mortem* examination, under an order from the city coroner, of a woman who had hung herself, the jury not being able to agree in their verdict. It is not often that a medical man is called on to make a *post-mortem* examination for the purpose of assisting the jury in coming to a correct verdict after death from hanging, the cause of death being so palpably visible; and how those twelve wiseacres could suppose that we should, by an examination after death, be able to discover the motive that could have induced this poor creature to commit such a rash act, I cannot conceive. But their ignorance was bliss *to us*, as it gave us an opportunity of making a very interesting examination.

The external appearance, and the gorged state of the blood-vessels of the brain, clearly proved that death had been caused by strangulation, and it also proved Dr. G. Burrows' theory on this subject to be correct. In removng the abdominal viscera we were struck with the size and vascular appearance of the uterus. As we understood she had been confined three months before, and the child soon after died, we thought the uterus might be impregnated, but on laying it open it presented to our view a most beautiful velvet-like appearance; the whole internal surface was covered with a dark, sanguineous mucus, which seemed to be exudating from it and could be easily scraped off. This unusual appearance we at once suspected to be the catamenial secretion, or the commencement of the process of menstruation.—There was no appearance of any discharge in the vagina, and in order to satisfy ourselves on the point as to whether she had been regular since the birth of the last child, we made inquiry, and learnt from a female friend who lived in the house with her, that she had menstruated *once* since her confinement, and she thought that she was expecting it again in a day or two. There is then indisputable evidence, and the strongest corroborative proof of the fact, that the source of the menstrual discharge, once so much disputed, is the inner membrane lining the uterus, and I think the strongest case recorded. As it is well known, and many remarkable cases are recorded, that hanging has a very curious effect on the organs of generation of the male,—Query, Did the apparently enlarged uterus, and the vascularity of the external part of this organ, arise from the process going on within, or from the mode of death? Perhaps some of your learned readers may be able to inform me.—*Prov. Med. & Surg. Journal.*

Case of Traumatic Tetanus: Administration of Æther.—By H. H. Broughton, M. D.—On Saturday, March 20th, I was called at 6 A. M., to Charles Prescott, a miner, residing two miles from this place. I found the left arm completely shattered by a large stone falling on it; he had not lost much blood; his comrade had tied a piece of cord tight round his arm, which completely checked the bleeding. He had walked home a distance of a mile from the shaft where the accident occured. I immediately amputated below the elbow-joint; three arteries required ligatures. He went on exceedingly well for some days. On Wednesday, the 24th, he was most anxious to get up, and on the wound being dressed, union had taken place by the first intention. On Saturday, the 27th, I found him sitting up and dressed; he said he was quite tired of bed. In the evening he sent down, stating he had taken cold. He had some aperient medicine sent him.

On Sunday the symptoms of tetanus became marked, there was considerable rigidity of the muscles of the neck and jaw, and difficulty in swallowing. He had an enema with turpentine, calomel, and an active aperient, which soon operated. The symptoms continuing, he had thirty minims of liquor opii sedativus, every hour, and belladonna to the neck and jaws. He was perfectly under the influence of opium, but without any remission of the symptoms of opisthotonos.

Monday evening. The spasms now most violent. Half a drachm of æther, added to each dose of opium, and calomel freely given through the night.

Tuesday morning. No better, but decidedly worse. We now determined to try æther. This was administered by means of Boott's apparatus. He was soon under its influence, and immediately all contraction and spasm ceased, and he got into a most comfortable sleep, which lasted full ten minutes. As soon as he became sensible the spasm and contraction returned, but scarcely so violent. He again enhaled the æther with the same result. He had it a third time; it again relieved him, and he was left asleep, and on visiting him I found he could open his mouth better. He was most anxious to have it again, but a violent spasm came on before I could get it to him, followed by another, and he immediately sank.—*Ibid.*

On Marking Ink, for marking Linen, &c., without the use of a Mordant. By Mr. Redwood.—The practice of marking linen and other similar fabrics employed as wearing apparel, or for domestic use, with a preparation of silver, commonly called *Marking Ink*, has prevailed for many years, and has now become almost universal. The preparation first introduced for this purpose consisted of a solution of nitrate of silver, thickened with gum arabic and coloured with sap green; but in using this solution it is necessary previously to apply to the article to be marked, a *preparation* or *mordant*, consisting of a solution of carbonate of soda.

The following formula has been very generally adopted in the preparation of this kind of marking ink:

℞.	Carbonate of Soda	℥ss.
	Distilled Water	℥iv.

Mix, and sign "*The preparation or Mordant.*"

℞.	Nitrate of Silver	℥j. ℈ij.
	Gum Arabic	℥ij.
	Sap green	℈j.
	Distilled water	f.℥j.

Mix and sign "*The Ink.*"

The ink made from the above, or a similar formula, which, I believe, almost every druggist through the country has been in the habit of preparing and selling, when used according to the usual instructions, produces a result which is subject to no objection that does not equally apply to any other marking ink having silver as its basis.

Within the last few years, however, the marking ink made as above, has been to a great extent superseded by the introduction of a new kind of ink, which does not require the use of a *mordant* or *preparation*. This ink appears to be generally preferred to the other; it is in one bottle, which occupies but little space, and its use is considered to be attended with less trouble and inconvenience than that of the other.

My atttention has recently been directed to this subject, as I was desirous of introducing a good formula for *marking ink, to be used as*

a mordant, into the new edition, now publishing, of Gray's *Supplement to the Pharmacopœia*. Several formulæ have been published in the Journals, for the preparation of this ink, but none of these have given complete satisfaction.

The following appear to be the principal requisites in this kind of ink:

1st. That it shall flow freely from the pen, and form a well defined mark without running or blotting.

2d. That it shall not require a very strong or long continued heat to be applied, by holding the article that has been written on to the fire, or passing a hot iron over it, in order to develope the black mark required.

3d. That the mark produced by it, when developed by the application of heat, or by exposure to light, shall be perfectly black.

4th. That it shall not destroy the texture of even the finest cambric.

After several experiments, I have succeeded in making a marking ink, which I think will be found to realize all the above conditions; it is thus prepared:—

℞.	Nitrate of Silver	℥j.
	Carbonate of Soda, crystallized,	℥iss.
	Tartaric Acid	℥ij. ℈ij.
	Strong Liquor Ammoniæ	f.℥ij. or *q. s.*
	Archil	f.℥ss.
	White Sugar	℥iv.
	Powdered Gum Arabic	℥xij.
	Distilled water	*q. s.*

Dissolve the nitrate of silver and carbonate of soda separately in distilled water: mix the solutions: collect and wash the precipitate on a filter; introduce the washed precipitate, still moist, into a Wedgewood's-ware mortar, and add to it the tartaric acid, rubbing them together until effervescence has ceased; add *liquor ammoniæ* in sufficient quantity to dissolve the tartrate of silver; then mix in the archil, white sugar, and powdered gum arabic, and add as much distilled water, if required, as will make f.℥vj. of the mixture.

It will be observed that the essential difference between this formula and those which have been already published, consists in the use of tartrate of silver, instead of nitrate of silver.—*Pharm. Journ.*

Death of M. Lisfranc.—The celebrated surgeon of La Pitie died on the 12th of May from the progress of diphtheriticangina, complicated with pernicious fever, during the second paroxysm of which he expired. M. Lisfranc was only sixty years of age. The funeral took place on the 14th inst. It was most numerously attended, and MM. Pariset and Serres, and others, pronounced on the grave speeches expressive of their feelings on the melancholy occasion. As an operator, Lisfranc was unequalled, and it is a serious misfortune that his work on Operative Surgery, though far advanced, was not completed

at the time of his death; his lectures, of the most practical nature, were always fully attended, and were remarkable at all times for the energy with which his opinions were expressed. Lisfranc has written few works: two volumes of clinical surgery, and an incomplete sketch of the art of operations; but in his books, as well as in his practice, the following principle is constantly illustrated:—"The operations of surgery are brilliant; but the art of the surgeon consists less in performing them with ability, than in rendering them useless by proper treatment." Lisfranc's researches on cancer, on uterine disease, on white swellings, and his method for the partial amputation of the foot, ensure to his name a place amongst those of the most distinguished surgeons of the French school.—*London Med. Times.*

Attempted Bribery of M. Magendie.—M. Magendie had been appointed as a special witness to give evidence on the question whether certain leeches which had been sold by MM. Vaucher and Laurens were "gorged" * at the time of sale. Madame Laurens, the wife of one of the accused, was charged with attempting to bribe M. Magendie. This gentleman deposed that the accused called on him on the 24th January. After having begged him to devote the greatest care to the delicate investigation entrusted to him, the lady withdrew, leaving upon his table a sealed packet, which she said contained memoranda for his guidance in the case! After her departure, M. Magendie opened the packet, and found that it contained three bank notes of 1000 francs. There was also enclosed a letter, not signed, from which the following extract was read:—'Let me beg of you to procure the dismissal of the complaint against MM. Laurens and Vaucher. This will be simple justice. Your time is valuable, and I therefore wish to remunerate you. No one shall know of my visit to you.'

Madame Laurens said, in her defence, that she had made a mistake in writing the letter; she had not intended to leave it behind her; and if it contained bank notes of 1000 francs, they must have got into the envelope without her knowledge. Her leaving the packet on the table must have been accidental. The tribunal, however, rejected this defence, condemned Madame Lurens to one month's imprisonment, and a fine of 300 francs; and they ordered the notes for 3000 francs, intended as the bribe, to be paid into the account for the benefit of the Parisian infirmaries."—*L'Union Medicale.*

Well done, Madame! but you must proceed more cautiously and prudently in future. You must learn better how to turn away the wrath or to soften the obduracy of those who report on your leeches. In Timbuctoo those who deal in gorged leeches manage things better.—*Dublin Med. Press.*

* In France leeches are sold by weight. It has been much the practice with leech-venders lately to let the leeches fill themselves with blood from calves, horses, and other animals, and sell them in this "gorged" state.

Case in which death was caused by eating raw rice. By Debert Howell, M. D.—Maria W——, a servant, aged twenty-two, previously in moderate health, but pale and anæmic, was taken suddenly ill with pain in the chest, while walking out in the evening of December 17th, 1846. At half-past seven, half an hour from the attack, she was suffering severe pain in the left hypochondriac region, attended by great restlessness. Percussion over the region of the stomach was not unusually loud. On inquiry, it proved that she had eaten in the afternoon, before her tea, a tumblerful of raw rice, mixed with milk, which she had been in the habit of eating, as well as arrow-root, sago, &c., in a raw state. The pain evidently arising from distention, caused by swelling of the rice in contact with the tea, and aided by the heat of the body, half a drachm of sulphate of zinc was administered as an emetic, which, failing to act, was repeated after twenty minutes. The stomach was then relieved, first of what appeared to be tea and wash, and afterwards, at intervals, of a large quantity of half-swollen rice, equal in bulk to an ordinary dinner-plate, piled; and she felt considerable relief from pain. The stomach-pump was not employed in this case, because it did not appear calculated to relieve the stomach of its half solid contents; in similar cases, however, it might prove useful by favoring the escape of gas. At eleven the following morning the pain increased suddenly, violently, with cold extremities, and feeble pulse, great abdominal tenderness, and she died at 4 P. M. On examination of the body, extensive peritonæal inflammation presented itself, with deposition of lymph agglutinating the intestines, and a copious effusion of turbid serum into the cavity of the abdomen. The stomach and duodenum were empty, with the exception of a few grains of raw rice at the pylorus, and perfectly free from inflammation. The small intestines were gorged throughout with a quantity of the same raw material that she had been in the habit of eating, apparently rice, arrow-root, &c., some raw and hard, and in parts so distending the intestine as to give the sensation to the fingers of feeling a bag of marbles, and and some in a half digested state. The large intestines were loaded with fæces. The heart was small, the lungs healthy. It is remarkable that the stomach was perfectly free from inflammation.—*London Lancet.*

The Influence of Strychnine on the Urinary Organs.—In several cases of paralysis affecting the lower extremities and the bladder, strychnine has been employed; and it has been remarked that it, in the first place, increases the urinary secretion, then causes very frequent desire to empty the bladder, and when this is done, it is attended with some smarting. This influence on the bladder declines in proportion as the effects of the strychnine manifest themselves in the muscles of the limbs.

In one case in which strychnine was given, a varioloid eruption came out, which did not suppurate, but terminated by crusty desicca-

tions. When this eruption came out, the paralysis declined, and the bladder acquired power.

Strychnine, from the observations just mentioned, would therefore appear to exert a stimulant effect on the muscular tunic of the bladder; and if so, its utility would be rendered probable in paralytic conditions of the bladder, whether they be idiopathic, or arise from a mechanical cause; and it would act as an adjuvant to other remedies, where a palsied state of the bladder is only symptomatic of other disease.—*Ibid.*

Spontaneous Amputation in a new-born Child.—M. Paul Dubois presented to the Academy of Medicine a child, two days old, which presented remarkable and rare congenital lesions. Immediately after its birth, it was perceived that the middle and ring fingers of the left hand were reduced to the first phalanges; the free extremities of the latter were rounded, and covered over with skin, except at a small part, which still presented a wound, and showed the removal of the distal phalanges to have been recent. From alongside these small wounds, arose a slender but resisting filiform prolongation, larger than the wanting phalanges would have been, otherwise it might be considered as the remains of them.

A similar lesion existed in the second and third toes of the left, and also of the right foot. The last phalanges were wanting, and stumps replaced them, presenting central wounds and filiform appendages, as in the hand.

The left leg presented, a little above the malleoli, an obvious constriction, circular and straight, as though it had been produced by a ligature, but no vestige of such a thing was to be found. The great toe of the right foot offered, on a level with its first phalanx, a similar constriction. This alteration, and the removal of the toes, seemed to constitute two stages of the malady. Lastly, the right leg also presented a circular depression, having the same characters, and occupying the same position, as the constriction on the left leg, but much less marked. At the time of birth, no trace of inflammation existed around the mutilated parts; but since, and under the influence of the new conditions of external existence, a true inflammatory state had been set up.

The umbilical cord was but half its usual length; the membranes enclosing the child seemed to be constituted only by the chorion; at least, the amnion could not be distinguished. The placenta offered nothing remarkable. Setting aside the mutilations described, the child was well formed and fully developed.

The mother was not taken into the hospital until after the membranes had burst, and it was impossible to discover any trace of the deficient members.—*Ibid.*

Modification of the Moxa.—M. Guepratt proposes to use, in the place of cotton or amidon, paper which has been dipped into a solu-

tion of subacetate of lead, and afterwards dried; or he would prefer cotton so treated, to paper. This he tears in strips, and rolls into small rollers, which he makes to adhere at first, on the part to be treated, by a solution of gum arabic.—*Ibid.*

Land-Scurvy.—We understand that land-scurvy is becoming prevalent in various parts of the kingdom. A great many many cases, with the features resembling those of sea-scurvy well marked, have been lately brought into the Edinburgh Infirmary. The patients had been labourers on railways, living on bad diet, and working on moors far from villages, so that they were not able to procure milk or vegetables, or even the common conveniences for cooking their food. It is singular that, owing as it appears to the great dearth of vegetable food, a disease which has been long extinct in the navy, is now making its appearance on land. The deaths from purpura registered last week in the metropolis were 5. against a spring average of 0.4. *Lond. Med. Gaz.*

A simple remedy for Cramps in the lower extremities. By Dr. S. A. Bardsley, Manchester.—Having myself been for many years a martyr almost every night to this torturing malady, and having tried in vain many of the "thousand and one" remedies usually prescribed for relief, I was at length led to reflect upon a fact which had hitherto escaped my attention, viz., while sleeping in a chair, with my lower limbs, if not touching the floor, yet so depending as to form an inclined plane with the whole of my frame, that I was in this position never disturbed by cramps; and upon inquiry I found other sufferers from habitual cramps were under the same predicament. These facts, in connection with some physiological considerations, induced me to put into practice the following plan, which has proved decidedly successful. My plan is to sleep upon an inclined plane, which is effected by taking care that the bed or mattress should incline twelve inches from the upper to the lower part of the bed; and for this purpose the lower feet were cut down so as to form this inclination. I will now state two facts, which are sufficient tests that neither the imagination nor intemperate diet were the causes of my habitual cramps. 1st. That after my trial of the inclined plane for seven consecutive nights with complete success, the housemaid, unknown to me, had raised my bed to its usual horizontal level, and, unconscious of the change, I went to sleep, when shortly afterwards the cramps were so severe as to compel me twice to alarm the family by my cries and moans; and it was not until I arose in the morning that I discovered the change in the form of my bed. 2d. The other test is the one which I made six weeks ago. After very spare diet of twenty-four hours, I replaced my bed from the inclined to an horizontal position, when, shortly after, I awoke with dreadful cramps—so violent in the muscles of the thigh and legs as to require two persons to hold the limbs down in order to apply friction, with stimulants, both external

and internal; indeed, the paroxysm was so severe and continued as to be accompanied with sickness and faintness. I deem it necessary to give a caution to sufferers from cramps, that the disorder is almost always connected with a weak or imperfect state of the digestive organs, and therefore, although the method now stated for relief will allow the sufferer several luxuries hitherto forbidden, yet there must be limits placed to such indulgences if he expects to pass the nights entirely free from his malady.—*Ibid.*

Fever in Liverpool.—We regret to state that there has been an alarming increase of fever and mortality in Liverpool during the last week, and that the disorder is not by any means confined to the lower classes. Two Roman Catholic clergymen have fallen victims to the pestilence. In addition to the deaths of Mr. Parker and Dr. Kelley, we have to report that Inspector Forsyth, one of the recently-appointed relieving-officers, after an illness of eight days, died on Friday morning. Mr. Gray, one of the overseers, is seriously indisposed. The same may be said of Mr. Staine and Mr. Lamonby, two of the relieving-officers, and also of three of the medical gentlemen connected with the parish, namely, Mr. Steele (only a few days appointed to the office,) Dr. Robert Gee, and Mr. Grimsdale, surgeon to the work-house. Three of the policemen employed as district relieving-officers have become afflicted with typhus; and an able-bodied pauper from the work-house, who was employed as an assistant in the new parish offices in St. Anne Street, caught the same malignant disease at those offices, and is dead.—*Ibid.*

Increase of fever in Ireland.—Deaths by famine are happily becoming rare, but fever is creating great ravages. The accounts from Kerry, Galway, Roscommon, and Longford, are of an extremely unfavourable character. In the union work-house of the latter county the number of deaths in the year ending the 1st of April, 1846, was 112, while for the corresponding period this year they amounted to 677.—*Ibid.*

A new application of Ether Vapour.—It occurred to me lately, that the vapour of sulphuric ether might be used, instead of fumes of sulphur, in taking honeycomb from bee-hives. By experiment, I find that a very small quantity induces the full narcotic effect of the drug on these insects; the insensibility continues for nearly an hour, and is followed by complete recovery.

The humanity as well as the economy of the plan will, I think, recommend it; various simple means may be adopted for the application of the vapour; a proper precaution would be to envelope the hive with an air-tight hood, formed of some such material as oiled silk; the fumigation need not last longer than five minutes.—M. D. *Ibid.*

London University College.—The distribution of prizes in the medical department of this University took place on the 1st inst., and on the occasion the hall was filled with the students and their friends. Lord Brougham, as President of the University, ocupied the chair, and the proceedings opened with the reading of the annual report by Mr. Liston, Dean of the Faculty of Medicine. From that document it appeared that the number of medical students who attended classes during the past year was 290, the number of the preceding year being 292.—*Ibid.*

The Diploma of the College of Surgeons obtained under false representations.—The Taunton and Somerset Branch of the Provincial Medical and Surgical Association, having discovered that Mr. James Dore Blake had obtained the diploma of the College of Surgeons by improper means, brought the matter before the Council. It appears that Mr. Blake had been for thirteen years prior to May 1845, a retail pastrycook, and that after one year of Medical study he presented himself at the College of Surgeons, London, for examination, and obtained their letters testimonial as to his fitness to practise. The council, after considerable delay, sent the following resolution to Dr. Woodforde, the president of the branch association:—"At an extraordinary meeting of the council of the Royal College of Surgeons of England, Tuesday, the 27th of April, resolved, 'That it appears to the council that Mr. James Dore Blake obtained his examination and letters testimonial by false statements and imposition; and the council does, therefore, recal such letters testimonial, and hereby declare the same to be void; also, that Mr. Blake be requested to return the diploma granted to him, he having ceased to be a member of this college.'—EDMUND BELFOUR, Sec."—*London Med. Times.*

Sydenham Society.—The Society held its fourth anniversary meeting on Saturday, May 1st, Dr. Latham in the chair. The report was read by the Secretary, Dr. Risdon Bennet, and represented the Society, as in a flourishing condition. A complete edition of Hippocrates was stated to be in progress, as also a work on medical physiology, and another on medical ethics. A work on ancient medical Bibliography was also in progress. The Treasurer read his report from which it appeared that there was a balance in hand of £700.—*Prov. Med. & Surg. Jour.*

Coffee in Poisoning by Acetate of Morphia.—A patient swallowed at one dose *ten grains* and three quarters of acetate of morphia.—Tartar emetic was immediaely given, but without producing vomiting. About three hours after the accident, and while the patient was in a state of deep coma, a highly concentrated solution of coffee with the solid residue was given to him. The paient swallowed about ten ounces in twelve hours. The coma disappeared, and he perfectly recovered.—*Gaz. Medicale.*

THE

MEDICAL EXAMINER,

AND

RECORD OF MEDICAL SCIENCE.

NEW SERIES.—No. XXXII.—AUGUST, 1847.

ORIGINAL COMMUNICATIONS.

Ovarian Dropsy, treated by tapping and injection of Solution of Iodine.

In the number of the Medical Examiner for June, 1846, we published an account of a case of Ovarian Dropsy by Dr. B. A. Allison, of Spencer, Indiana, in which, after repeated tapping, he injected a solution of iodine into the sac. The novelty and boldness of the operation and its apparent success, excited much attention at the time, and the paper was extensively copied, with various comments. Under these circumstances, the following extract of a letter received from Dr. Allison, dated June 11, 1847, will be read with interest, and perhaps lead to a further trial of the practice which in his hands seems to have been eminently successful.

"Soon after the date of my letter to you containing an account of the case of Mrs. C—— (May, 1846,) her menses returned, and have continued regular ever since, and she has enjoyed as good health as any woman in the neighbourhood, excepting that the orifice, where tapping was performed, is not entirely closed yet, and occasionally discharges a few drops of healthy pus. A curious feature occurred in her case soon after she began to take exercise—her lower extremities became affected with numerous large, spreading and obstinate ulcers, which yielded, however, in time, to the bandage, and occasional application of the citrine ointment."

BIBLIOGRAPHICAL NOTICES.

SYDENHAM SOCIETY. *The Works of William Harvey, M. D., Physician to the King, Professor of Anatomy and Surgery to the College of Physicians. Translated from the Latin, with a Life of the Author.* By ROBERT WILLIS, M. D., Member of the Royal College of Physicians and Surgeons of England, Corresponding member of the Royal Academy of Sciences of Göttingen, &c. 8vo. pp. 624. London, 1847.

It was but right, that one of the earliest labours of the Sydenham Society should be directed to the preparation of a complete edition of the works of the great Englishman, whose discovery of the complete circulation of the blood has immortalized his name; for whatever may be the disposition—and a proper one it is—to do justice to the predecessors of Harvey, it is pretty universally admitted, notwithstanding the views and arguments adduced by our learned and venerable friend, Dr. Cox, that the perfection of the great discovery was his; and when, it may be asked, has a discovery of the kind ever been made *de novo*? Observation after observation has usually been registered for a long period; until ultimately some one has topped the pyramid, and completed the undertaking; whilst, as in the case of every great discovery or invention, the surprise has been, that so apparently simple a result should not have been attained by hundreds as well as by the 'lucky' individual who made the last and most important step.

It was not—as we have previously said, when noticing this same subject—the person who first discovered the propulsive power of steam, or even he who first rudely applied it to the formation of an imperfect engine, that deserved the credit of that wonderful result of human ingenuity—the steam engine; but the man who, like Watt, made it a master-piece of mechanism; or, like Fulton, showed that it could be applied so wonderfully and fearfully to the purposes of navigation.

The editor of the edition of Harvey's works, now before us, with much self-complacency—which is, indeed, too apparent throughout his preface—flatters himself, that he has "set his [Harvey's] claims to the whole and sole merit of the discovery of the circulation in a new and clearer light than they have yet been seen;" and that he has done "more than any preceding biographer in exhibiting his moral nature; for truly he was as noble in nature as he was intellectually great." p. viii.

Dr. Willis gives, at considerable length, the views of the predecessors of Harvey, as well as of his opponents—contemporaneous and others—on the great question of the circulation. His predecessors, doubtless, paved the way for the ultimate discovery; and we would pause, therefore, before assenting to Dr. Willis's conclusion, that Harvey has "claims to the whole and sole merit of the discovery of the circulation." Indeed, Dr. Willis is scarcely consistent on this point, for in alluding to the views of Fabricius of Acquapendente, who had given especial attention to the valves of the veins, he adds:

"Fabricius could observe, and he could describe; but he wanted the combining intellect that infers, the imagination that leads to new ideas—to discovery. Though he did little himself, however, to advance the sum of human knowledge, he proved a tooth in the wheel that has since put in motion the whole machinery of medical science (?). He it was who sowed the seed, little dreaming of its kind, which, finding one spot of congenial soil, sprang up a harvest that has continued to nurture the world of physiological science to the present hour."

We have looked carefully over the remarks of Dr. Willis on this formerly much contested subject: but we confess, with every disposition to render him ample justice, we cannot arrive at the conclusion, that he has "set Harvey's claims to the whole and sole merit of the discovery of the circulation in a *new* and *still clearer* light than they have yet been seen." We are unable to discover the *new*, and it is not a more easy matter to detect the *still clearer*, for which he asks credit. The "excellent summary"—as he properly terms it—of the entire doctrine of the circulation by Dr. Freind in his Harveian oration, appears to us

more novel, and at least as clear. To this Dr. Willis refers his reader for other information—adding, neither in the proper spirit of courtesy nor of philosophy—

"I pass by the still-recurring denials by obtuse and ill-informed individuals, of the truth, or of the sufficiency of the evidence of the truth, of the Harveian circulation. Those who *can* not see, must, contrary to the popular adage, be admitted to be still blinder than those who *will* not see."

The following is Dr. Willis's conclusion:

"Having now disposed of the claims that have been set up in behalf of one or another, as the discoverer of the circulation, and shown, we trust satisfactorily, that these are alike untenable, we should now proceed to discuss the question of cui bono?—but this meets us in so forbidding an aspect, brimful as is our mind with a sense of the all-importance of the knowledge we had from Harvey, and seems so little to belong to our subject, that we gladly pass it by unnoticed; though it be only to find ourselves encountered by that other topic, but little more congenial to our mood of mind and intimate persuasion—the merit of Harvey as a discoverer. Few, very few, have been found to question this; but as one man of undeniable learning and eminence in his profession,* has very strongly, it seems to us, been led to do so, it will not be impertinent if we cast away a few words on this matter.

Discovery is of several, particularly of two kinds; one sensible or perceptive; the other rational or inductive; the former an act of simple consciousness through an impression made on one or more of the senses; the latter a conclusion come to by the higher powers of the understanding dealing with data previously acquired by the senses and perceptive faculties. We look through a telescope, for example, and we perceive a star which no one had seen before; we note the fact, and so become discovers of a new star. The merit here is not, surely, very great, though the added fact may be highly important. Again; one of the planets is subject to such perturbations in its course that to compose exact tables of its orbit is held impossible. These perturbations are referable to none of the known perturbating causes. A great astronomer suggests the influence of an exterior and unknown planet as their cause. A consummate mathematician and

* Dr. William Hunter. Introductory Lectures, p. 59, (4to. London, 1784,) to which the reader is referred for a singularly inconsistent and extraordinary string of passages.

physical astronomer makes trial of this suggestion: he assumes the ascertained perturbations as elements; he combines these under the guidance of knowledge and reason, and at length he says, that if the course suggested be well founded, there or thereabouts it must exist; and lo! on turning the far-seeing tube to the point in space he had indicated, there in verity gleams a new world, then first seen, though launched by God from eternity to circle on the verge of our creation; and he who bade us look, became the discoverer of a new planet. Who will dispute the merit here? Truly, man does show the God within him when he uses his faculties—God-like in themselves—in such God-like fashion. But Harvey's merit, according to our idea, was of the self-same description in another sphere. The facts he used were familiarly known, most of them to his predecessors for nearly a century, all of them to his teachers and immediate contemporaries; yet did no one, mastering these facts in their connection and sequence, rising superior to prejudice, groundless hypothesis and erroneous reasoning, draw the inference which now meets the world as irresistible, until the combined mind of Harvey gave it shape and utterance. To our apprehension Harvey was as far above his fellows, as the eye of poetic intelligence, which exultingly absorbs the beauties of the starry sky, and the green earth, is above the mere physical sense which distinguishes light from dark. The late Dr. Barclay, a fervent admirer of Harvey, whose name he never uttered without the epithet immortal, has put the question of Harvey's merit both happily and eloquently, and it affords us pleasure to quote the passage from the writings of our old and honoured teacher in anatomy. "The late Dr. Hunter," says Dr. Barclay,* "has rather invidiously introduced Harvey along with Copernicus and Columbus, to show that his merit as a discoverer was comparatively low. But what did Copernicus, and what did Columbus? Not in possession of more numerous facts than their contemporaries, but endowed with nobler and more vigorous intellects, the one developed the intricate system of the heavenly bodies, and the other discovered an unheard of continent. Was it not in the same way, by the exertion of superior intellect, that Harvey made his immortal discovery? I know not what has happened in the world unseen; but if I may judge from the records of history and the annals of fame, the spirit of Bacon, the spirits of Columbus, Copernicus and Newton, have not been ashamed to welcome and associate with the congenial spirit of Harvey." To this fine passage there is little to be added: Harvey's discovery

* On the Arteries, Introduction, p. 9.

was of the rational and inductive, and therefore higher class, according to our estimate; it was made in virtue of the intellectual powers which peculiarly distinguish man in a state of the highest perfection."

The volume before us, after the Preface, Life of William Harvey, and his last will and testament, contains "An anatomical disquisition on the motion of the heart and blood of animals;"—"The first anatomical disquisition on the circulation of the blood, addressed to John Riolan;"—"A second disquisition to John Riolan; in which many objections to the circulation of the blood are refuted;"—"Anatomical exercises on the generation of animals; to which are added essays on parturition; on the membranes and fluids of the uterus, and on conception;—Anatomical examination of the body of Thomas Parr; concluding with sundry letters on matters of science, addressed to Dr. Caspar Hofmann, Paul Marquerd Slegel, John Nardi, R. Morison, John Daniel Horst and others."

The works of Harvey were written originally in Latin; but most of them were rendered into English; so imperfectly, however, in some cases, that Dr. Willis says he undertook the task of translating them anew. The "masterwork" of Harvey on the motion of the heart and blood, he found to "have been translated by one but little conversant with the subject," and "that it was both extremely rebutting (?) in point of style, and full of egregious errors," so that "nothing short of an entirely new translation could do justice to this admirable treatise, or secure for it, at the present day, the attention it deserved."

The work on generation he likewise translated over again, as well as that on the anatomy of Parr. The letters have never appeared in English before.

We have not had time to compare Dr. Willis's version with the original, in order to decide whether he has avoided the charges he has laid against his predecessors. It becomes him however, to have been extremely cautious; and we cannot avoid thinking that the fact of his having entirely retranslated works which had been generally received as correct versions of the original, savours not a little of the self-complacency to which

we have before alluded; as well as a desire to absorb the whole credit;—seeing that it would have been easy for him to have compared the original with the translation, and to have corrected any thing "rebutting" in the style; or any inaccuracy in conveying the meaning of the author; and we must say, in conclusion, that whilst we hail with unallayed pleasure this edition of the works of one of the shining lights of medical science, we are by no means satisfied that the best possible selection has been made of Editor.

Observations on Aneurism, and its Treatment by Compression. By O'Bryen Bellingham, M. D., Edin. Fellow of and Professor in the School of the Royal College of Surgeons in Ireland, etc. etc. etc. John Churchill. London: 1847.

In this interesting *brochure*, Dr. Bellingham gives us a brief history of the treatment of Aneurism by Compression, and the various improvements in the mode, accompanied by an abstract of the cases that have been reported in which compression has been used; the instruments employed, and the theories upon which compression has been supposed by different writers to cure aneurism.

"The author's views respecting the pathology of aneurism, particularly the exact manner in which the disease is cured, differ from those usually taught;" and he has endeavoured to prove that "the cure of aneurism is accomplished in a similar manner, whether the ligature is employed or compression is used, or whether the cure has been brought about by Nature's unaided efforts." That the latter is true, is highly probable, from the uniform simplicity observed in the processes of Nature on other occasions, and the explanation of our author, which we shall notice presently, is at least plausible. The employment of cutting instruments upon the living body, where it can be avoided without incurring other or greater evils, is always to be deprecated, and every plan which holds forth a reasonable hope of relief without such a resort, is entitled to calm and impartial consideration. The result of all the experiments for the cure of aneurism by compression, has not been such as to warrant our confidence in relying upon it in the generality of cases; but if

it can be shown that a false theory has been entertained on this subject, under the guidance of which an erroneous practice has been pursued, the case becomes altered in its aspect most essentially.

The objections that have been urged against compression by authoritative writers are principally the following:

1st. Uncertainty of success, from the impossibility of applying sufficient force to bring the sides of the vessel into contact, so as to cause adhesive inflammation and consequent obliteration of its cavity, in many instances from its being surrounded by soft and elastic tissues that take off the pressure.

2d. Impossibility of continuing the pressure long enough to be effectual, in consequence of the extreme suffering of the patient from compression of the large nerves which accompany all the principal arteries.

3d. Danger of sloughing, in consequence of the long continued pressure.

All these evils have undoubtedly been experienced, and the question is, whether, according to Dr. Bellingham's theory, and the practice founded upon it, success can be attained without such risks.

"Surgical writers appear," says Dr. B., "to have been under the impression, that in order to cure an aneurism by compressing the artery above the tumour, it was essential to interrupt completely the current of blood through the vessel—in fact, to to apply such pressure as would act like a ligature, cause inflammation of the coats of the artery at the part, and obliterate the circulation in the vessel at the point to which compression had been applied.

"When it was considered absolutely necessary for the success of compression, that such an amount of pressure should be applied as was almost certain to produce sloughing of the part, and very certain to occasion intense pain and suffering; and when, in addition, this was to be prolonged through five successive nights and days, (as in the case reported by Mr. Guthrie) we can readily understand why patients refused to submit to it, and we can easily account for the disrepute in which the practice fell; and for the unwillingness of surgeons to adopt this treatment, in preference to the simple operation of placing a ligature upon the femoral artery. It would, however, appear that it is not at all essential that the circulation through the vessel leading to the aneurism should be completely checked, but rather the con-

trary: it may, perhaps, be advantageous at first, for a short period, by which the collateral circulation will be more certainly established; but the result of this case, if it does no more, establishes the fact, that *a partial current through an aneurismal sac will lead to the deposition of fibrine in its interior, and cause it within a few hours to be filled and obstructed, so as no longer to permit of the passage of blood through it.*

Pressure, so as altogether to obstruct the circulation in an artery, must necessarily be slower in curing an aneurism, as it must, in some measure, act by causing obliteration of the vessel at the part to which the pressure has been applied; whereas *a partial current through the sac enables the fibrine to be readily entangled in the parietes of the sac in the first instance, and this goes on increasing until it becomes filled;* the collateral branches having been previously enlarged, the circulation is readily carried on through them."

Several cases are narrated by the author, wherein these results of moderate compression were proved to have taken place, by post mortem inspection of the parts.

That aneurism may be cured in the manner recommended by Dr. Bellingham is admitted by eminent living surgeons, but the priority of the practice as well as the theory is not so readily accorded to him. Mr. Wilde, the able editor of the Dublin Quarterly Journal, awards the credit to the late Mr. Todd of that city. Professor Syme of Edinburgh, whilst he denies to Dr. B. any just claims to originality, condemns the practice as inapplicable to aneurism of the large arteries generally, although he admits that, in certain cases, where for special reasons the ligature cannot be used, compression should be tried.

If the doctrine contended for, however, and which it is not difficult to test, shall be established by sufficient observation, we can see no reason why compression should not supersede the knife and the ligature in nearly all cases, and should Dr. Bellingham's earnest advocacy be productive of so good and desirable an improvement, he will indeed have earned a proud claim to our gratitude.

The following remarks, extracted from Chapter X., present a *resumè* of the positions assumed by Dr. B.:—

"When we consider how many writers have devoted their attention almost exclusively to the subject of aneurism, and how much talent has been engaged in illustrating its history, patho-

logy, and treatment, it appears strange that the process whicl nature herself sets up for its cure should have been so muc overlooked hitherto by surgeons; and although this process wa daily, I may say, passing under their eyes, that the exact mod in which it was accomplished should have attracted but littl attention, and no attempts should have been made to imitate o assist it.

In almost every case of aneurism, where the disease has sub sisted for some time, we find a larger or smaller amount of soli matter deposited in the sac, which is composed of the fibrine o the blood, arranged in regular concentric laminæ.

Examples of the spontaneous cure of aneurism, in which th sac is completely filled with fibrine deposited in regular concen tric layers, are not very uncommon.

Again, in cases of valvular or other disease of the heart, whe a considerable impediment exists to the circulation through it chambers, we know that the fibrine of the blood will separat from its other constituents, and form the bodies improperly terme polypi, (which are sometimes so closely interwoven with th carnæ columnæ and chordæ tendineæ as to be with difficulty de tached,) which, by closing the orifices, or obstructing the actio of the valves, not unfrequently prove the immediate cause o death.

These familiar facts all tend to prove—

1st. That nature herself sets up a process by which, unde favourable circumstances, the cure of aneurism is effected.

2d. That the mode in which she effects this, always in interna aneurism, and frequently in external aneurism, is by the depo sition of the fibrine from the blood in the sac of the aneurism until it becomes filled.

3d. That the fibrine in such cases is deposited in regular con centric laminæ, the oldest or first formed next the sac, those mos recently formed nearest the centre.

4th. That a current of blood through the aneurismal sac is necessary agent in bringing about this result.

5th. That any obstruction to the current by which its velocit and amount are diminished will accelerate the deposition o fibrine in the aneurismal sac.

6th. That once this process has commenced, if the same agen continue in operation, it will go on until the sac becomes fille and no longer permits of the entrance of blood.

Writers upon aneurism hitherto appear to have been mor intent upon solving unimportant points connected with the dis tinction between true and false aneurism; or in ingenious specu lations as to the comparative frequency of aneurism from dilata tion of all the coats of the artery, or from rupture of the interna

and middle coats, than in investigating the mode in which a spontaneous cure of the disease takes place. Indeed so little notice is taken of this process in some modern works, that one would suppose the authors were either ignorant of the facts just stated, or looked upon the phenomena as too unimportant to dwell upon.

Before proceeding further, there is a point upon which I wish to make a few remarks. In the details of the cases of aneurism treated by compression which have been published within the last three years, the writers speak of the coagulation of the contents of an aneurismal sac, or of developing a coagulum in it by pressure upon the artery at the cardiac side, as if a coagulum or clot, and the concentric laminæ of fibrine which form in aneurisms, were identical: indeed, from the loose manner of expression adopted, it is sometimes difficult to tell whether the writers are aware of the distinction between them. This is the more remarkable, because the two substances in appearance, colour, and consistence, present a remarkable contrast; the one being soft and loose, of a very dark colour, not deposited in any regular order, and composed of the red globules and fibrine of the blood; the other being solid and firm, of a paler colour, deposited in regular concentric laminæ, and composed of fibrine alone, or with a very small proportion of the red globules. The former is commonly found in the auricles of the heart, and in the large veins which open into them, and is familiar to every body; the latter constitutes the solid matter, which, in greater or less quantity, fills the sac of old aneurisms.

It is obvious, therefore, that the mode in which these two different deposits are formed cannot be the same. To cause the deposition of fibrine in an aneurismal sac, it is essential that a stream of blood should pass through it for a period that will vary according to different circumstances; but its deposition will be promoted or encouraged by diminishing the strength of the current in the artery leading to it, and by lessening the amount of blood which passes through the sac. This, it is easy to understand, can be readily accomplished by compressing the artery at the cardiac side of the aneurism, and the pressure need not be so strong as to occasion very great pain to the patient.

On the other hand, to bring about the coagulation of the contents of an aneurismal sac, the blood must remain at perfect rest for a considerable time; if a current continues to pass through the sac, the blood in it will be replaced by another portion before there is time for its coagulation; for although a coagulum or clot will quickly form when blood is removed from a vein, it is not so easy a matter to bring about its coagulation in an aneurismal sac in a living subject. To effect this, very considerable pres-

sure would be necessary; the compression likewise, it appear to me, would require to be made upon both the cardiac and capillary side of the sac, and very near the latter; while the process will necessarily be so painful that few patients would be willing to submit to it.

It would appear then—

1st. That it is not by the formation of a coagulum in the aneurismal sac that nature effects the cure of the disease, but by the deposition of the fibrine from the blood which circulates through the sac.

2d. That simply diminishing the current will not cause the coagulation of the contents of an aneurism, but it will occasion the deposition of fibrine in the sac."

Lectures on Subjects connected with Clinical Medicine. By P. M. Latham, M. D., Fellow of the Royal College of Physicians, and Physician to St. Bartholomew's Hospital. Second edition. 8vo. pp, 158. Barrington & Haswell: Philadelphia 1847.

We are pleased to see a second American edition of the lectures contained in this volume. Few medical writers of our day equal, and none excel Dr. Latham, in clearness and concisenes of expression, aptness of illustration, or justness of the views he inculcates.

The volume before us consists of fifteen lectures on various subjects—all deserving of the greatest consideration. The first is "On the Education of Medical Men," and presents the clearest and soundest view of the subject we have ever read—no sophomore declamation, but sound, common sense reasoning. A short extract or two will show the author's style, and something of his views on this subject.

"There is no subject which at this time more needs the consideration of sober-thinking and reasonable men, than that of professional education.

The subject of education generally is one of great difficulty yet, strange to say, it is one upon which any body thinks himself qualified to construct a system, and establish rules, and dictate to a whole community; not aware, perhaps, that the wisest men have exercised themselves upon the same, with very doubtful success.

Milton wrote a treatise on education, and so did Locke. And it was in reference to them that Dr. Johnson said, 'Education in England has been in danger of being hurt by two of her greatest men.'

Strange things have been said in jest, or in earnest, concerning the studies necessary to form a physician. Sydenham advised Sir Richard Blackmore to read Don Quixotte. He probably spoke in jest. But it is impossible to read Sydenham and not perceive that his mind did in truth hardly admit any auxiliary to the exercise of its own observation. What he says of anatomy must startle the pains-taking pathologist of modern times, who bestows all his industry in tracing diseases home to the primitive structure in which they are engendered. Anatomy, he has told us, is only fit for a painter. Sydenham might have been *professionally* learned; but there is no evidence in his works that he was so. Perhaps he was offended with the kind of learning then in repute, which tended to make the practice of physic rest chiefly upon authority; or, perhaps, the very structure of his mind was such, that it was really incapable of gaining any thing second-hand which it could gather fresh from the reality; or perhaps he had a noble confidence in that wonderful faculty of observation with which he was endowed, and so resolved to use and to trust it to the uttermost, unaided and unencumbered by any foreign helps.

But Sydenham's education, in so far as it was not professional, was evidently of the best kind. His mind had been early acquainted with a strict, indeed with a scholastic discipline. His book is that of a scholar; I do not mean on account of the language in which it is written, but in its form and structure. Without any apparent artifice, the material facts, and delineations, and histories, arrange themselves all in the right places for being well understood; and they are all so skilfully reasoned upon as to lead you easily and naturally to the conclusions he desired.

Are we then justified, not by the advice of Sydenham, which was probably spoke in jest, but by his example, in concluding that nothing more is required, to fit a man for the safe and successful practice of physic, than a good *general* education, and an industrious use of his own observation in his intercourse with the sick? I think not; and, among many other reasons, especially for the two following:—First, Because you cannot tax the faculty of observation beyond its *common* powers and capacities, you cannot estimate it in the generality by what it was in Sydenham, and look to it for the same results. This would be the same thing as to take measure of all mankind by the proportions of a

giant, and make the single wonder of a hundred years the common expectation of every day.

Secondly, Supposing the faculty of observation existed in each of us at its utmost perfection, and enabled each to learn by it all that it is in its own nature capable of teaching; yet there are objects beyond its reach, the knowledge of which has, in the progress of our art, come to be considered as essential to the safe and successful practice of physic as those which lie strictly within its sphere; I mean the knowledge of morbid processes in all their variety, as they affect the structure and functions of our bodies. This knowledge has been derived from other methods of research, from anatomy, from chemistry, from experiment; and you can only gain it either by the use of such methods yourselves, or from the instruction of those who have used them. Sydenham himself could gain it in no other way.

But in our own day, there is little fear that students will be spoiled by the recommendation of their instructors to be content with a scanty knowledge, and trust to their own sagacity for the rest. They are not likely to suffer harm by having Sydenham held up as an example for imitation; the fear is of another kind (and it is well grounded), namely, that many men of the best abilities and good education will be deterred from prosecuting physic as a profession, in consequence of the necessity indiscriminately laid upon all for impossible attainments, of which no example is or can be held forth for their imitation.

After giving a sketch of the requirements insisted on by some persons before a student "can betake himself with effect to the observation of real disease, and hope to acquire a practical skil in treating it," Dr. Latham proceeds:

"Now I am persuaded that there does not exist at this day in the profession an individual who comes up to the standard which (it is implied) all ought to reach. It has been my happiness to know many men in my time who have had enough of attainmen to command my highest respect; some who have reached grea eminence during their lives, and some who have been though worthy of monuments since their deaths; yet I have known one, and one only, who came up to the requirements of an introductory lecture which I have read; and that was Dr. Thoma Young. But Dr. Young stood alone among mankind. The most learned and scientific men of his time were struck with wonder at the extent and variety of his knowledge; yet Dr Young was the only person whom any man now alive ever saw learned and scientific enough for a physician, according to the Utopian measure of things.

If all medical students had fifteen or twenty years at their disposal, and could dedicate them all to professional education, we might pardon a little innocent declamation in displaying the rich and varied field of knowledge about to be disclosed to them; but even then, sober truth would compel us to confess that the field so pompously displayed far exceeded in extent what the best minds could hope to compass, even in fifteen or twenty years. When, however, we recollect what space of time the majority of men so addressed really can give to their education, the whole affair becomes inexpressibly ludicrous.

Now I do protest, in the name of common sense, against all such proceeding as this. It is all very fine to insist that the eye cannot be understood without the knowledge of optics, nor the circulation without hydraulics, nor the bones and the muscles without mechanics; that metaphysics may have their use in leading us through the functions of the nervous system, and the mysterious connection of mind and matter. It is a truth; and it is a truth also that the whole circle of the sciences is required to comprehend a single particle of matter: but the most solemn truth of all is, *that the life of man is three score years and ten.*

How has it happened that while, in other countries, the medical profession has been exhibited under every imaginable form of ridicule, here, in England, it has been so seldom chosen as a fit thing to laugh at? The truth is, that here no idea of ridicule was ever popularly associated with it; and to have exhibited it as if there were, would have been out of nature and unsuccessful.

A vain, pompous, counterfeit form of knowledge without, and a downright stolid ignorance and incapacity within, made up a precious combination, which, not long ago, was found every where abroad. The mockery and fun that it excited were irresistible and inexhaustible; and Molière and Le Sage made the world ring with laughter at the expense of physic and physicians.

Depend upon it, what all men indiscriminately are told they *ought* to know, all men indiscriminately will soon *pretend* to know, be it never so extravagant; and when every medical man in every town and village throughout England, be he physician, surgeon, or apothecary, shall, in right of his profession, claim the homage due to vast learning and science, there will not be wanting some Molière or Le Sage to hold us all up to the just ridicule of mankind.

Let us take care then what we are about, and beware how we change the character of the English practitioner of physic. He is sound and unpretending, and full of good sense: what he wants is a little more careful, and a somewhat larger instruction

in what bears directly upon the practical part of his profession. Give it him (indeed we *are* giving it him), and he will become more trustworthy and more respected every day. But for all that is beyond this, we may recommend it, but we must not insist upon it; we must leave it for each man to pursue according to his leisure, his opportunities, and his capacity, and not exaggerate it into a matter of necessity for all. Where too much is exacted, too little will be learned; excess on the one hand naturally leads to defect on the other.

I know that much disquietude, if not unhappiness, has been felt by students, and especially by the best informed and best disposed, when, at the entrance of their profession, they have been met by obstacles which seem insurmountable. It is the special infirmity of ingenuous minds to reflect with too much anxiety upon their own knowledge; to sit in judgment upon themselves, calculating whether they have made the best of all their opportunities, and wishing, vainly wishing, that their time might come over again, to enable them to supply this omission, or rectify that mistake. By many such, who are at all times too ready to deal hardly with themselves, every exaggerated statement of what they are required to learn is severely felt.

A well-weighed scheme of professional education, sound and practicable, comprehensive yet moderate in its requirements, and adapted to all, besides the many good purposes it would serve, would have the special benefit of satisfying the minds of students themselves that at each step of their progress they are in the right path. Such a scheme we are not likely to have soon. I will not presume to suggest what it ought to be; I would rather endeavour to show you, that, in spite of what you are at present inclined to fear, you may hope to earn a good reputation, to deserve and gain the approbation of mankind as others have deserved and gained it, although you do not possess a perfect literary and philosophical education.

Turn away, then, from the contemplation of this ideal perfection, which can only make you despair, and look to some real examples for your encouragement. But take care that they be *high* examples, and such as no small or ignoble efforts can imitate."

The chapters on "The Doctrine of Symptoms," embrace auscultation and the various physical signs of disease, and ought to be studied by all who aspire to a knowledge of these subjects.

Half-Yearly Abstract of the Medical Sciences. By W. H. Ranking, M. D., etc. Assisted by Drs. Guy, Day, Ancell, and Kirkes. No. 5, *January to July*, 1847. Philadelphia, Lindsay and Blakiston.

We had hardly thought of looking for this number until we found it upon our table, so prompt have all those been who are concerned in bringing it out; to the American publishers, in particular, the greatest praise is due, for supplying it to us at so early a date after its appearance in Europe.

In looking over the present number, we have found the same careful selection of matter and admirable arrangement so conspicuous in its predecessors. The "*Reports*," which constitute an important feature of the work, are characterized by great ability and impartiality.

THE MEDICAL EXAMINER.

PHILADELPHIA, AUGUST, 1847.

NATIONAL MEDICAL CONVENTIONS.

We have received the official copy of the "Proceedings of the National Medical Conventions, held in New York, May, 1846, and in Philadelphia, May, 1847." An account of the Convention which assembled in New York was published in the Medical Examiner last year, and a considerable portion of the proceedings of that held in Philadelphia has likewise been laid before our readers, and the remainder will appear as we can afford space. In our Record department of the present number will be found the "Report" of the committee on "a uniform and elevated standard of requirements for the degree of M. D." The *report* is plainly written, and manifests throughout good temper and honorable purpose; but its reasonings, to our mind, are not always conclusive; not because of any lack of in-

ductive power on the part of its authors, but from the want of a proper attention to some of the facts which are involved in the questions discussed.

The Committee, it will be seen, institute a comparison between the requirements for medical honors in the United States and those demanded in the oldest countries and most absolute governments of Europe, where the precepts of the Colleges are enforced by the strong arm of the law, and where every licensed practitioner is protected in the exercise of his profession; and where, too, in the strongest instances cited, the educational expenses of the student are borne by the government.

"We are free to confess," say the Committee, "that within the last twenty or five and twenty years, medicine has been better taught among us than at any former period."

This is certainly true; and we are glad to have the testimony of the Committee to the fact, for it would seem to be the opinion of some enthusiasts on the subject of "reform in medicine," that every thing is growing worse, and that medical instruction, as well as every other thing medical, is absolutely approaching the lowest point of degradation.

We are probably correct when we say that a majority of the Convention which adopted the declaration we have cited, as well as several of the committee from whence it emanated, received *their* medical education under circumstances and at a time when, according to the *report*, medicine was not so well taught among us as at present and yet we do not believe that any one of these respectable gentlemen thinks, or would have others to think, that *his* education was so defective as to disqualify him for the proper performance of the duties of a physician; and if not, with what justice can such a conclusion be predicated of those who now enjoy the *greater* advantages admitted by the report!

Again—"It is unquestioned," says the *report*, "that the facilities for education have been augmented, not only in the public schools of the country, but private enterprise has exerted no slight influence in the attainment of this end."

That "the facilities for education have been augmented," and, in the larger medical schools, at least, are every year "augmented," is a fact familiar to all who have enjoyed opportunities for observing. This, one would think, ought to satisfy well wishers of our profession that the present system—a system which, it is confessed, leads to regular improvement—should not be hastily or inconsiderately

changed. The "private enterprise" alluded to, we understand to mean, the numerous associations and individuals engaged in lecturing on the various branches of medicine and collateral subjects; and we are happy to agree with the report in the estimation of their utility. These private teachers are found in all our large cities where Medical Colleges exist, and, by occupying the summer months, in effect extend the term of instruction, which students may enjoy, to eight months or more in the year. Not only is "the term" extended in this way, but students have the opportunity of hearing the views of different teachers on the same subjects, and are thus led to compare and examine for themselves; and what is also important, the perpetual tread of these aspirants for professional honors upon the heels of those preceding them, prevents the possibility of the latter falling back, or even standing still. But fill up a large part of the year with college exercises, and this "private enterprise" to which the report accords, and justly accords, so much good, will be crowded out of existence—a result which certainly none but lazy and incompetent professors ought to desire.

We are glad to perceive that the *report* attaches much importance to the efforts of "private preceptors" in elevating the standard of our profession—a subject upon which we shall probably offer some remarks in a future number.

After an enumeration of the branches proposed to be taught in the schools—which are precisely those now taught in our principal colleges—the *report* argues: "With a lengthened period for teaching, a double advantage will be gained; a wider extent of information may be imparted to a student, while his time will be occupied with fewer lectures during the day." If "a wider extent of information" can be imparted in fewer lectures, most teachers will be glad to learn how; but if it require that *the number of lectures shall be increased* to attain this end, and fewer are to be given each day, then, according to our computation, it will require a very considerable extension of the term to accomplish the object. Among the resolutions passed by the late Convention, was one requiring that not less than *one hundred* lectures should be given on any one of the branches; but, on discovering that this would nearly *double* the number of lectures now given on certain of the branches, while the scheme of the Convention only contemplated *one-third* additional time, it was rescinded on the very next day—shewing that, however desirable the change, it was then deemed neither practicable nor expedient.

The first *resolution* reported by the committee, and adopted by the

Convention, recommends "to all the Colleges to extend the perio employed in lecturing from four, to six months." Believing th proposition to be one of doubtful expediency, and that no conferenc among the Colleges in reference to the matter had occurred or w likely to occur, at least before their next sessions, we have felt som interest to know what course would be generally pursued on the sul ject. We have now before us the advertisements of most of them from Maine to Louisiana, and from the Lakes to the Atlantic, an with a single exception, we have not discovered any change in thei former course, that looks like conforming to this recommendation In the excepted case, the only departure from the course hithert pursued, as far as we are advised, consists in the annunciation tha the lectures "will commence on Monday, October 18th," instead o the first Monday of November, and extend to the end instead of ter minating at the middle of March. We have, we confess, been sur prised at the almost unanimous concurrence in the action of the Col leges in this matter—the more remarkable because it is without con cert or any conference whatever. That so many institutions, widel separated, placed under diverse circumstances and controlled by dif ferent councils, should arrive at the same conclusion, in opposition t the recommendation, and the *threat* contained in one of the resolu tions, of the Convention, is indeed very remarkable, and show clearly enough what those who have experience in the matter think on the subject,—that it is environed with greater difficulties tha some have contemplated.

The tenth and last *resolution*—"That it be considered the duty of Preceptors, to advise their students to attend only such institution as shall rigidly adhere to the recommendations" of the Convention seems to be unheeded by them all. We do not know of a single Medical College in the United States that rigidly adheres to all of the recommendations, or proposes to do so.

The whole subject, in fact, of education, is one of very great diffi culty,—particularly where masses are concerned, the individuals o which are so unequally circumstanced as are young men spread over an extensive country, with different habits, means, objects and indications, such as we find engaged in the pursuit of medicine as a profession. On another page we have copied some remarks on this subject, by Dr. Latham, which are deserving of attention both from the learning and eminence of their author and the sound common-sense views they express.

CATALOGUES OF MEDICAL COLLEGES.

We have received the catalogues and annual circulars of the following institutions, viz.:

University of Louisville.—The last Legislature of Kentucky granted a charter for a University, under which the late Medical Institute of Louisville has become the Medical, and the suspended Louisville College is to become the Academical Department; a Law Department being also added. Number of the medical class of the last session, 348.

Medical Institution of Geneva College.—Number of Graduates at the last commencement, 43.

Medical Department of Transylvania University.—Class 205; Graduates, 68.

Willoughby Medical College.—This institution has been removed to Columbus, Ohio; number of the last class, 90.

Baltimore College of Dental Surgery.—This institution continues its useful career as heretofore, under the same Faculty and scheme of instruction.

RECORD OF MEDICAL SCIENCE.

We received the following account of the proceedings of the Chester County Medical Society, from the Secretary, Dr. Worthington, in time for our last number, but by accident it was omitted. We shall be more careful of any favors we may receive from the worthy Secretary, or any of his fellow members, in future. Among the members of the Chester County Medical Society we discover the names of gentlemen who have long been eminent as practitioners, and some who have made important contributions to the literature of our profession, and we regard their re-association, aided and incited by the younger brethren to whom they have extended the right hand of fellowship, as fortunate for themselves and auspicious for science.

CHESTER COUNTY MEDICAL SOCIETY.

The Chester County Medical Society, which had suspended its operations for sixteen years, held a meeting on the 8th of June, 1847. Members present: Dr. Wm. Darlington, President; Doctors Isaac Thomas, John B. Brinton, C. W. Parish, Isaac Pennington, and Wilmer Worthington.

The following physicians were elected members and signed th constitution :—

Doctors J. R. Walker, S. H. Harry, C. R. Parke, John Edge, W W. Reese, E. F. Rivinus, W. D. Hartman. R. H. Smith, N. H Clarke, John Kinsey, S. Harris, J. T. Huddleson, and E. Harvey.

The Society appointed Drs. Worthington, Parish and Rivinus t revise the constitution, and report to next stated meeting.

The following are the officers for the present year :—

President.—Dr. William Darlington.

1st Vice President.—Samuel McCleane.

2nd Vice President.—Isaac Thomas.

Corresponding Secretary.—C. W. Parish.

Recording Secretary.—Wilmer Worthington.

Treasurer.—E. F. Rivinus.

Orator.—Wilmer Worthington.

Drs. Pennington, Thomas, Harry, Harris, Walker, Parish, an Huddleson, were appointed a committee to ascertain and report next stated meeting, the names and residences of all the regularl educated physicians in Chester and Delaware counties.

Adjourned to meet at Westchester, on the first Wednesday of Sep tember next, at 2 o'clock, P. M.

WILMER WORTHINGTON.

Report of the Committee appointed under the fourth resolution of t National Medical Convention, which assembled in New York, May, 1846.

Resolved, —That it is desirable that a uniform and elevated stan ard of requirements for the degree of M. D. should be adopted all the Medical Schools in the United States; and that a committ of seven be appointed to report on this subject, at a meeting to held in Philadelphia on the first Wednesday in May, 1847.

Committee—Drs. Haxall and Cullen, of Richmond; S. A. Pattesc Manchester, Va,; A. Flint, Buffalo, N. Y.; J. Perkins, Castleton, V J. A. Wing, Albany, N. Y.; Geo. W. Norris, Philadelphia.

The committee under the fourth resolution of the convention whi assembled in New York in May, 1846, and which has for its obj the adoption of a uniform and elevated standard of requirements f the degree of M. D., have had the same under consideration, and b leave to offer the following

REPORT.

The excitement which appears to have pervaded the medical mi for some considerable time in relation to the subject of reform, only in this but in foreign countries, would of itself present an arg ment sufficiently demonstrative of its importance.

The ceaseless and unwearied exertions of the master-minds of t profession, constantly urging on improvement in the various depa ments of medicine, have elaborated a work which it will requ years of toilsome study justly to appreciate; and while we are

from indulging the Utopian idea that the newly graduated student is to be immediately transformed into the accomplished physician, yet do we believe from the complaints which spring from almost every quarter, that lamentable deficiencies do exist, and that these deficiencies should be corrected.

Nor do we stand alone in this opinion. The same spirit of reform which has assembled this convention, produced in Great Britain amendments to the charters of her Colleges, and convoked the Medical Congress which sat in Paris, than which a more renowned body of men never met to deliberate upon the interests of the profession, Not a great deal, it is true, has yet been accomplished in Great Britain, owing to the influence still exercised by medical corporations, and the indifference with which Parliament has regarded the efforts of the reformers. But in enlightened France, protected and cherished as are all her literary institutions by government, the most propitious results have been obtained. The term of study has been prolonged; other branches of medical education have been added to the already extensive curriculum, and more frequent and rigid examinations have been adopted by which to test the qualifications of the candidate.

And when we consider the existing systems of other countries, how vast a difference is manifested upon the most cursory examination; truly must it be acknowledged that the mass of our medical graduates is inferior to those of other climes, or that the talent of America, like its broad and impetuous rivers, or its majestic forests, can recognize no equality in others.

We are free to confess that within the last twenty or five-and-twenty years, medicine has been better taught among us than at any former period. It is difficult to imagine, indeed, that the progressive efforts of foreign lands should pass wholly unnoticed in this; and, while their example has been productive of some improvement, much yet remains to be accomplished. It is unquestioned that the facilities for education have been augmented not only in the public schools of the country, but private enterprise has exerted no slight influence in the attainment of this end. But let us not remain stationary while the interests of society and the profession impel us to further advancement.

If we discard the preliminary education demanded of students in Europe, and confine our attention to the branches actually taught in the medical schools, it will be perceived that the deficiency on our part is sufficiently apparent. All the branches which we profess to teach are taught by them; in addition to which (and now we refer more particularly to continental institutions) we may enumerate the several subjects of Zoology, Botany, Comparative Anatomy, the History of Medicine, Hygiene, Medical Physics, and Clinical Medicine and Surgery. All these branches, it is true, are not crowded upon the mind during a single session, but are distributed throughout successive years; while clinical instruction, in both medicine and surgery, is reserved for the last year or two, after it is presumed the student has made such advances in his primary studies as will enable him per-

fectly to understand the lessons which are taught him at the bedsid of the patient.

Instruction so full and so complete must, of necessity, require lengthened period for its accomplishment; hence we find that, i France and Austria, the term of lectures is extended to a fractio more than four years; in Germany to three years and four months in Great Britain to two years, while in the schools of our own coun try, two sessions of four months each are alone sufficient to entitl the candidate to an examination. And if we extend our inquiries step further, we shall find as great a contrast in regard to the exami nations by which the qualifications of candidates are tested. Nowhere we believe, except in England and America, is the qualification mad to rest upon a single viva-voce examination; but throughout the perio of the student's probation, repeated examinations are held at state intervals. By proceeding in this manner, not only is the qualificatio more accurately ascertained, but certain branches are completel mastered before others have been commenced. Thus we learn fro Mr. Surgeon Wilde's work on Austria and her institutions, that, Vienna, the student is compelled to undergo an examination at th end of every six months by each professor whose lectures he ma have attended. During the fifth year, which completes his term study, he is subjected to two other examinations, besides giving a de tailed history of two or more clinical cases, and defending in public thesis written in the Latin language. In Prussia, four examinatio are required. When the pupil has satisfactorily completed the thir the honors of the Doctorate are conferred upon him; but he is not y permitted to enter upon the practice of his profession. To enjoy th privilege, a more rigid ordeal must be passed; he is now called upo to demonstrate his *practical* acquaintance with the several subject in which he has been instructed; to take charge of patients under th immediate inspection of his teachers, and finally to be questioned b eight of the most distinguished professors of the country in every d partment of medical science. By a recent decree of the Universit of France, it is now ordered that examinations shall be held at th termination of each year upon the branches which have been taug during the year; at the conclusion of the whole term of study, a fin examination is instituted, embracing the subjects taught throughou the whole course. A knowledge of clinical medicine and surgery also required, and a thesis must be publicly defended.

Although thus rapidly and most imperfectly enumerated, we hav thought it not inappropriate to the subject to mention the requisitio which are demanded in foreign schools. They either exact of the pupils an unnecessary standard of requirements, or we, on the co trary, are satisfied with too low a grade of qualification. Which alte native is this convention prepared to adopt? Are we willing to asse and maintain the opinion that he who has passed eight months withi the walls of a medical college is as well fitted for the practical duti of his profession, as he who has devoted years to more extende studies? Assuredly we cannot advocate a proposition so absur

Nor, perhaps, is it at all requisite to occupy the time of the convention with a long detail of arguments in order to prove the *necessity* of some measures of reform.

In regard to the two subjects of preliminary education and the mode of examination, this committee has nothing to do. But being charged with the duty of reporting upon a uniform and elevated standard of requirements for the degree of M. D., whatever alteration in the present system it may recommend, will more immediately bear upon the interests of the schools. Yet let it not be supposed, as some we fear have imagined, that the object of this Committee, or of this convention, is to attack with a ruthless hand the institutions of the country, rendered venerable by time, or that still larger number whose charters have been obtained at a more recent date. We believe that no agrarian feeling has stimulated to action the advocates of reform in this or any other land: we dare express the conviction that the best interests of society and of the profession itself (which spring from no selfish considerations,) could alone have commenced a work, which, if calmly and perseveringly conducted, must redound to the good of all.

We are aware that many obstacles are opposed to the successful prosecution of the several matters upon which we have assembled to deliberate. With no National Legislature to regulate our Medical Institutions, and with a reckless indifference to their concerns too often practised by our State Governments, each has endeavoured to build up for itself, if not an enduring reputation, at least a long catalogue of names. And the colleges themselves, resting secure in their chartered rights, may contend against any interference with their several systems of education; although we would fain indulge the hope that some among them stand prepared to listen to that voice which rarely speaks in vain—the voice of public opinion. This it is which now agitates the professional mind from one end of this Union to the other; and this it is which, if not now heeded, will not cease to reiterate its cry. Let but a very few even of our conspicuous institutions demand of their pupils a more extended course of study, and so far from their interests perishing in the attempt, we cannot doubt that an accession to their numbers will ere long reward their efforts. The possession of the diploma no longer tests the qualification of the man; and it cannot be doubted that the large number of Medical Colleges throughout the country, and the facility with which the degree is obtained, have exerted a most pernicious influence. Numbers of young men have entered the profession who were not prepared for its onerous and responsible duties, who, after a longer or shorter period of disappointment, have served to swell the list of empirics, or to seek employment by means unbecoming the character of the physician or the gentleman. Nor can it well be otherwise, when each returning spring lets loose upon the community some twelve or thirteen hundred graduates, whose professional existence must depend upon the encouragement they receive.

To correct these evils it is indispensable that the standard both of

preliminary and of medical education should be elevated; and as w
have said before, let no institution fear to commence the laudab
undertaking. The encouraging plaudits of the profession will che
it on, and its general voice will direct our medical students to th
source of information from which is to be derived the largest suppl
We are, moreover, unwilling to inflict such discredit upon the ingen
ous youth of the land as to imagine, that they would not voluntar
become the pupils of that school whose diploma is to be gained by
more prolonged and complete course of study. They will feel th
their success in after life will mainly depend upon the labours of the
earlier years; and when success shall crown their efforts, they w
enjoy the proud satisfaction of knowing that it is based, not upon t
disgraceful trickery of the impostor, but upon the solid foundation
positive acquirement.

It may not, perhaps, be wandering too far from our legitima
course to remark, that no ordinary responsibility rests upon Profe
sors themselves. They stand as the guardians, more than any othe
of the public weal; for every student who receives the diploma,
furnished by them with *prima facie* evidence, that he is prepared
that important occupation in which he seeks to engage. And if w
admit the supposition that in any case he is not thus prepared, it w
require the prediction of no seer to foretell the lamentable resu
We believe the opinion defensible, that in no profession is it mo
difficult to arrive at just conclusions, as to real merit, than in that
medicine. "And hence (in the language of another) there devolv
upon those who are the most competent to judge, and who have t
best opportunity for judging, a vast responsibility to see well to it th
none but the truly meritorious should be admitted to the professi
under their sanction. From the fact that society cannot in this r
spect adequately protect itself, the Teachers in our Medical Schoo
should exercise a guardianship the more watchful, a jealousy t
more keen, and a firmness the more unyielding." With a determ
nation thus expressed, to furnish the community with individuals w
have gained the honours of the Doctorate solely on account of th
merit, it cannot be saying too much when we assert that a reciproc
duty rests upon it; a duty which should ever lead to the protecti
and encouragement of those who have devoted their time and tale
to its dearest interests.

The most beneficial consequences may also be expected from t
efforts of private Preceptors. The position can scarcely be cont
verted, that a proper inquiry into the fitness of young men to beco
Students of Medicine is but seldom instituted; and numbers ha
been admitted into the offices of their Preceptors who were deficie
even in the most common branches of an English education. T
long has it been imagined, and too often has it been asserted, th
the veriest dolts possessed intellect sufficient for the study of me
cine. To such the idea could never have occurred, that within
broad and expanded limits may be profitably included a knowled

of almost every science; nay, more, may we not truly say that a high and exalted position can never be attained, unless the mind be well stored with an amount of collateral information which will be found to bear upon our professional studies at every step?

There is another point in which the preceptor sometimes fails to do his duty. We are too often satisfied with merely placing the most approved authors, if you please, in the hands of our pupils, without instituting a regular series of examinations and explanations, in default of which the impressions produced by reading are frequently evanescent, if not erroneous. The inexperienced mind of the student requires so to be regulated in its pursuits, that each successive link in the chain of information may be properly adjusted; by which arrangement not only is much economy of time and labour secured, but the field of knowledge is thus gradually expanded before him, until finally he is brought to comprehend its whole area in all its uniformity and beauty. Let us then exercise a jealous watchfulness over our pupils in these particulars; let us remand to academical teachings the individual who has neglected the rudiments of a common education, and let us feel that we have not rightfully earned our fees of tuition, unless we shall have honestly laboured to advance the student's interests by all the means in our power.

In entering upon the principal purport of this report, it is deemed advisable to remark, that in order to obtain a knowledge of the requirements demanded by the various schools of the country, a letter was addressed to all whose existence was known to your committee, requesting them to furnish the desired information. These consisted of thirty-three in number; and answers were received from nineteen, being a fraction more than one-half. In the majority of instances pamphlets were forwarded to the chairman, containing the rules and regulations of the college, together with the branches taught; while from others, letters were received simply stating that two full courses of lectures were demanded, that the candidate must be twenty-one years of age, of good moral character, &c. From this correspon dence but little available information was derived. A circular was then dispatched to the different colleges propounding the following questions, answers to which were respectfully solicited. Nineteen of these circulars were filled up and returned.

State 1*st*. The number of students during the session of 1845–6.
2d. The number of graduates in 1845–6.
3*d*. The number of charity pupils in 1845–6.
4*th*. The number of professors attached to your school.
5*th*. The date at which lectures begin and end.
6*th*. The requirements for a degree.
7*th*. Is the inquiry made previous to examination, whether or not these requirements are fulfilled?
8*th*. Is any evidence of having attended a course of clinical instruction necessary to graduation?

9th. Is it required of candidates for graduation that the shall have devoted any time to dissection?

The responses to these several questions have been arranged tabular form, from which the result of the whole correspondence m be ascertained at a glance, and which your committee beg leave lay before this Convention, as a part of this report. We cannot avo the expression of our regret, that so many of the colleges have fail to respond to our circular, not, we hope, from a listless indifferen to the subject, or a determination not to abide by the recommend tions of this body. Information was also requested from the prop authorities in regard to the requirements of surgeons in the army a navy of the United States; but no reply has been received fro them. (See Note A.)

In summing up the information obtained from the nineteen colleg named in the table, in the order in which the questions were propose it will be found that the number of students belonging to these ins tutions during the session of 1845–6, amounted to 2544, including non-paying pupils; and that the number of graduates was 730; the number of professors varies from *three* to *eight*. It may be pr per to remark that the lowest number here named is attached to t University of Virginia, where the usual branches of medical educ tion are taught, and where the term of study extends throughout t period of *nine* months. If we exclude this institution from our tab the minimum is *five* and the maximum is *eight*. The time employ in lecturing also varies; *thirteen* weeks being the shortest, a *eighteen* the longest period. *Sixteen* weeks, however, are devoted the lectures, in a large majority of the schools. The requiremer for the degree of M. D. appear to be very general;—the candida must be twenty-one years of age;—his moral character good;—h examination satisfactory;—his thesis passable, and he must ha attended two full courses of lectures, to be included within the peri of three years' study. In some of the schools a practice of fo years and an attendance on one course of lectures, is sufficient entitle the individual to an examination. Branches are taught some institutions which are omitted in others, and the manner which these are distributed is by no means uniform. It appe without exception that the inquiry is made previous to examinatio whether or not all the requirements have been fulfilled, and in so cases unquestionable proof of the fact must be adduced. Eviden of having attended a course of clinical instruction is required *twelve* of the colleges, while in *seven* it is not; and as to dissectio *five* render it obligatory, and the remaining *fourteen* are content urge its recommendation.

Such, then, is the information which the committee, after diligent i quiry, is enabled to lay before this body. It would have been a matt of some importance to have received answers from all the schools, in that case an account entirely accurate of the whole number of st dents in the United States would have been obtained. (See Note B

It will be seen that the nineteen colleges which noticed our circular, report the aggregate number to be 2544; and if it be proper to assign the same ratio to the fourteen which did not, the whole number of students during the session of 1845–6, will be found to be 4418 and a fraction. We believe this to be a very fair statement, for several statistical tables published from time to time in the journals, have varied but little from this amount; and if we extend the same rule to the classes of graduates, we reach the conclusion that a fraction less than 1300 were added to the already existing number of physicians, in the spring of 1846.

The very large number of physicians in the United States, a number far larger in proportion to its population than in any other country perhaps of which we have a correct knowledge, has frequently been the subject of remark. To relieve the diseases of something more than twenty millions of people, we have an army of Doctors amounting by a recent computation to forty thousand, which allows one to about every five hundred inhabitants. And if we add to the 40,000 the long list of irregular practitioners who swarm like locusts in every part of the country, the proportion of patients will be still further reduced. No wonder, then, that the profession of medicine has measurably ceased to occupy the elevated position which once it did; no wonder that the merest pittance in the way of remuneration is scantily doled out even to the most industrious in our ranks,—and no wonder that the intention, at one time correct and honest, will occasionally succumb to the cravings of a hard necessity. The evil must be corrected. With a government like ours, to diminish the number of medical schools is not to be expected; and the corrective can alone be found in the adoption of such a standard of requirement, in the general estimate of which the recommendations of this committee will form but an item, as will place the diploma beyond the reach of those who seek to wear its honours without deserving them.

The shortness of the time allotted to the delivery of Lectures, we believe to be an evil of no small magnitude. It is next to an impossibility, that the strongest intellect can receive and well digest some half a dozen discourses or more a day, embracing subjects which have oftentimes little or no immediate connection with each other. The mind becomes wearied with the multiplicity of its occupations, and the thoughts of to-day are forgotten in the constantly recurring and harassing duties of the morrow. A proper allotment of time cannot be given to that deep reflection which the importance of the subject demands, and without which no solid advancement can be made. There are individuals, too, who do not always rest satisfied with professorial prelections, who approve in its fullest extent the adage, "nullius addictus jurare in verba magistri," and who seek in the recorded experience of others the widest extent of information. Nor can Teachers themselves, with every disposition to impart the fullest instruction, do justice to their several branches within the limited period of four months. For this reason, the examination

which may, indeed, test the actual acquirement of the student, c never embrace an extensive field of knowledge. Under the prese regulation this cannot be expected; for justice to the pupil must pr vent an inquiry into subjects in which he has never been instructed

In regard to the branches to be taught, it is not improbable that t recommendation of the Committee may not meet the views of sor of the members of this Convention. It may be thought that othe should have been added, and that consequently the number of Pr fessors should have been considerably augmented. This subject w freely canvassed by the Committee, and the opinion was general th in the commencement of our effort to reform the existing condition things, too high a standard of requirement ought not to be immediate insisted on. The conclusions to which this Convention may cor upon any subject, cannot be forced upon the schools contrary to the wishes. In the advice of this body there exists, however, a mor power which it would be unwise to disregard, a power which, wh it seeks to elevate medical requirement, should not impose a sing requisition which is not entirely practicable. Besides, it is to recollected that the decrees of this Convention need not be final a unalterable. The National Medical Association, contemplated und the first two resolutions adopted at the meeting in May last, which is to be hoped will convene from time to time in different parts of t country, can legitimately exercise the same influence which we no seek to do; and when in after time it may be deemed advisable add new subjects of instruction, it will not hesitate to express opinion. Under this view of the matter, your Committee advise th lectures be given on the following branches, in all the Colleges: vi on the Theory and Practice of Medicine; the Principles and Pra tice of Surgery; General and Special Anatomy; Physiology a Pathology; Materia Medica; Therapeutics and Pharmacy; Midwife and Diseases of Women and Children; Chemistry and Medical Jur prudence.

These subjects, it is true, are now taught in the majority of o schools. With a lengthened period for teaching, a double advanta will be gained; a wider extent of information may be imparted to t student, while his time will be occupied with fewer lectures duri the day. As to the appropriation of the several branches, it is deem inexpedient to make any suggestion, as the circumstances of ea Institution may be such as will necessarily lead to a different arrang ment in this particular.—It is believed, however, that a slight au mentation in the number of Professors will become necessary.

In regard to clinical instruction, your Committee would willing have made it a requisition to the attainment of the diploma; but insuperable difficulty seemed to exist. It is believed that few of th Colleges have Hospitals attached to them, and in very many instanc where such Institutions exist in the Cities, the Professors do not r ceive the appointment of attending Physicians and Surgeons. Co

sequently, the opportunity is lost to them of imparting such instruction as would be valuable to the student.

We cannot, however, close this portion of our report, without urging the very great importance of clinical instruction. Many a young man has entered upon the duties of his profession, sufficiently instructed, it may be, in its principles, who has most painfully felt the responsibility of his position. In default of a certain degree of practical knowledge, indecision must often fetter his efforts to the detriment of his patient, and that self-confidence, which can alone restore serenity to his mind, must be purchased by a long period of perplexing doubt. During the pupilage of the student, he should lose no opportunity of witnessing cases of disease wherever they are to be found. Instructors themselves, should esteem it their highest duty to introduce their pupils to the bedside of their patients in all cases where propriety will admit of it. The Hospitals, Penitentiaries, and Poor-houses, found in so many of our towns and cities, will furnish from time to time, cases of every description, while the pauper practice of the country will prove no indifferent means of imparting clinical information. Instruction gained from these sources in free and familiar conversation with the Preceptor, will perhaps be of more avail than any other; for the large number of students who occasionally throng the Wards of the Hospital, render it impossible for each one to obtain a correct knowledge of the cases presented to him. We do not intend by this remark to convey the idea that information given in this way would be valueless. On the contrary, when properly conducted, it may be made productive of the greatest good. Let the Professor daily analyze the symptoms which arise in every case: have them carefully noted down in his ward-book, together with his prescriptions, and at its termination let him review the whole ground, aided by a post-mortem examination if it result unfavourably, and he will impart instruction which is truly valuable.

By reference to the table accompanying this report, it will be seen that only five of the colleges insist upon dissection as a requisite to graduation. Your committee accord in the opinion, that all should render it obligatory upon the student to devote some portion of his time to this needful pursuit. To enter into an argument to prove its absolute necessity not only to the surgeon but also to the physician, would be a work of supererogation. We therefore offer without further remark, the following resolutions for the adoption of this Convention:

Resolved, 1st. That it be recommended to all the colleges to extend the period employed in lecturing, from four, to six months.

2d. That no student shall become a candidate for the degree of M. D., unless he shall have devoted three entire years to the study of medicine, including the time allotted to attendance upon the lectures.

3d. That the candidate shall have attended two full courses of lectures, that he shall be twenty-one years of age, and in all cases

shall produce the certificate of his preceptor, to prove when he com
menced his studies.

4th. That the certificate of no preceptor shall be received who i
avowedly and notoriously an irregular practitioner, whether he shal
possess the degree of M. D. or not.

5th. That the several branches of medical education already name
in the body of this report, be taught in all the colleges; and that th
number of Professors be increased to seven.

6th. That it be required of candidates that they shall have *steadil*
devoted three months to dissections.

7th. That it is incumbent upon Preceptors to avail themselves o
every opportunity to impart clinical instruction to their pupils; an
upon Medical Colleges to require candidates for graduation to show
that they have attended upon Hospital practice for one Session, when
ever it can be accomplished, for the advancement of the same end.

8th. That it be suggested to the Faculties of the various Medica
Institutions of the country to adopt some efficient means for ascertain
ing that their students are actually in attendance upon their lectures

9th. That it is incumbent upon all schools and colleges granting
Diplomas, fully to carry out the above requisitions.

10th. That it be considered the duty of Preceptors, to advise thei
students to attend only such institutions as shall rigidly adhere to the
recommendations herein contained.

All which is most respectfully submitted.

May, 1847. Ro. W. Haxall, *Chairman.*

Note A.—After finishing this report, a communication was re
ceived from H. L. Heiskill, acting surgeon-general, in answer to the
letter addressed to the surgeon-general late in May, 1846.

The absence of this officer from the seat of government prevented
an earlier reply. Such portions of said communication as have refer
ence to the subject matter of this report, your committee have thought
proper to embody in this note. Many of the duties required of army
surgeons are of course not performed by practitioners in civil life.

"Under the regulations the medical officer is required to investi
gate the physical agents that may affect the health of the troops, to
make reports upon the medical topography of his station, to aid in
the selection of military positions, and, as a question of military hy
giene, to express his views in respect to the diet, clothing, watering
and exercises of the troops. He is from the necessity of the case a
general practitioner in the most extended sense of the term, and from
location he is often thrown entirely upon his own resources, and de
prived of the advantage of calling to his aid the friendly counsel of
professional brethren."

"Nor have the army medical officers been regardless of the high
claims of medicine in itself as one of the *liberal* professions. Them
selves medical men, they feel a deep interest in the character of the

profession, and rejoice in any measure that would tend to promote its honour and efficiency."

Next follows a table showing the number of applicants examined from the year 1841 to 1845, both inclusive, being a period of five years. It here appears that 51 were examined, while only 17 were approved.

"The most striking cause of failure on the part of the candidates are, *insufficient preparatory education; a hurried course of professional pupilage; want of proficiency in practical anatomy*, in *pathology*, and in *clinical medicine*."

"The candidates are examined on the branches usually taught in our medical schools, also on their literary and scientific attainments, embracing a grammatical knowledge of the English language, Latin, and natural philosophy (or physics,) which are deemed important branches of education to those entering on the study of a *liberal* profession. Each candidate is required, as introductory to his examination, to prepare in writing a brief extemporaneous description of the causes, symptoms, pathology, treatment, &c., of such diseases as may be assigned by the Board, together with one or more prescriptions proper in the case, written out in form for the apothecary."

A merit roll accompanies the communication, which shows the branches upon which the applicants are examined. These are as follows: "Literary and Scientific qualifications, Anatomy and Physiology, Principles and Practice of Surgery, Principles and Practice of Medicine, Obstetrics, Materia Medica, Chemistry and Medical Jurisprudence."

"In the several branches herein enumerated, the candidate is required to be well grounded. The examinations are conducted with the view of ascertaining the measure of his natural endowments, his general professional intelligence, as well as his exact knowledge, his practical ability and strength of judgment."

Note B.—The Chairman received the reply of the Indiana Medical College, located at Laporte, on the Thursday before leaving home;—too late to be inserted in the table which had then been completed. In 1845–6, it had 81 students, 18 graduates and 6 Professors.

TABLE.

Names of Medical Colleges.	Number of students in the Session of 1845–6.	Number of graduates at close of session of 1845–6.	Number of charity pupils in 1845–6.	Number of professors attached to the college.	Date at which the lectures begin and end.	The requirements for the degree of M. D.	Is inquiry made before examination if they are fulfilled?	Is clinical instruction necessary to graduation?	Is dissection required as indispensable to graduation?
Medical College of Georgia.	112	30	0	7	2d Monday in November. Last day of February.	2 full courses of lectures. Usual private reading. Thesis. Good character.	Yes	No	Yes
Medical School of Me. Brunswick, Vermont.	70	19	0	5	Middle of Feb., and continue 13 weeks.	3 years study. 2 courses of lectures. Good character.	Yes, and enforced	No	No
Medical Department of the University of St. Louis.	53	11	0	7	1st Monday in Nov., end 1st day of March.	3 years study. 2 courses of lectures. 21 years old. Thesis.	Yes	Yes	No
Dartmouth College, Hanover, N. H.	85	31	0	6	Aug. 13., Nov. 21, 16 weeks.	2 courses of lectures. 3 full years study. Thesis.	Written evidence to be placedon file	No	No
Willoughby Medical College.	164	32	0	8	1st Wednesday in Nov., continue 16 weeks	3 years study. 2 courses of lectures. 21 years old. Thesis.	Yes	No	No
Medical College of Ohio, Cincinnati.	195	46	3	6	1st Monday in Nov. Last day of February.	21 years. 3 years study. 2 courses.	Certificate required to prove it	No	No
University of Pennsylvania.	414	171	6	7	1st Monday in Nov. About middle of March.	21 years. 3 years study. 2 courses of lectures. Thesis, &c.	Tickets are always examined	Yes	No
Franklin Medical College, Philadelphia.	35			7	2d Monday in Oct. Last day of February.	3 years study. 2 courses. 21 years, &c.	Yes	Always	No

Medical Department of University of Louisville.	345	73	0	7	1st Monday in Nov. Last day of February.	2 courses, 21 years; or 1 course and 4 years practice.	Yes	Yes	Yes
Geneva Medical College, New York.	178	45	four state pupils	6	1st Monday in Oct. Last Tuesday in Jan.	21 years. 2 courses. Thesis.	Written evidence or sworn to	No	No
Massachusetts Medical College.	159	47	0	6	1st Wednesday in Nov. 1st Wednesday in March.	21 years. 2 courses. 3 years.	Yes	Yes	No
Albany Medical College, New York.	113	46	four by law	8	1st Tuesday in Oct. 16 weeks.	21 years. 3 years study. 2 courses. Thesis.	Certificates are required	No	No
Western Reserve College, Cleveland, Ohio.	160	53	0	7	1st Monday in Nov. 16 weeks.	3 y're. study. Thesis. 2 courses, or 4 years practice and 1 course.	Yes	No	No
University of Virginia.	55	13		3	Continue 9 months.				
Medical Institution of Yale College, N. Haven.	53	19	8	6	Information is imperfect.	Bachelors of arts, 2 y'rs. study, all others 3 y'rs. 2 courses. 21 y'rs. &c	Certificates are required	No	No
College of Physicians and Surgeons, N. Y. City.	218	48	4	6	1st of November. Last day of February.	21 years. 3 years study, 2 courses, First examination before faculty, second before trustees, third before public on Thesis.	Certificates are required	No	No
Med. Department of Hampden Sydney College, Richmond, Va.	74	18	0	6	1st of November. 1st of March.	2 courses of lectures. 21 years. Thesis, &c.	Yes	No	Yes, one course
Washington University of Baltimore.	45	19	2	7	1st of November. 1st of March.	2 courses of lectures. Thesis, &c.	Yes	No	Yes
Total . . .	2513	730 Graduates	31 non-paying students (charity)						
Non-paying students, or charity students . .	31								
	2544								

Cases of Organic Diseases of the Womb and its Appendages. W
Walter Channing, M. D.—Chronic organic affections of the wo
and of its appendages have long been the reproach of medici
They, many of them, tend to death, are malignant, and, having a b
name, little more is done for them than to make them as tolerable
the sufferer as well may be. Dr. Wm. Hunter, in a manuscript le
ture of his on cancer of the womb, in my possession, makes ma
sensible remarks on the best mode of retarding those processes whi
always end in death. Thus he advises abstinence from animal foo
except fish now and then, and of these recommends such only as a
of white flesh, and have the least flavor—are the least stimulating,
other words. He is particular in his rules about dress, and especial
directs that women with functional or organic disease of the womb
its appendages, and those, too, who would escape these, should we
flannel drawers. Rest, also, is among his prescriptions, and sarsap
rilla his principal medicine. But Dr. H. says nothing about cu
His means have in view only to retard the advance of destructi
processes, as ulceration in cancer, and so to prolong life. He do
not look to cure, as among the purposes of treatment in such disease
He would mainly labour to make a life of daily suffering more tole
ble than without his agency it might be.

Osiander, of Gottingen, labored to cure, to remove radically, mali
nant diseases of the womb. He cut away diseased portions, and wi
a bravery which was always tempered with wisdom, and guided b
the best knowledge of what he meant to do, and how it should be be
done. He was often successful. McDowell, a physician in o
western wilds, determined to do something to prevent the fat
issue of diseased ovaries, and in pursuing this purpose extirp
ted them, with a success, and in numbers, and under circumstance
which made an epoch in that department of surgery. Dupuytre
and others followed Osiander in excising the mouth, the neck,
larger portions of the womb, but they were not very successfu
Lizars, and quite lately Gray, have followed McDowell in his oper
tions, but with less success.

Occasionally a case is referred to, of removal, either spontaneousl
or by, or after the employment of medicine, of these diseases. I ha
thus known a cauliflower excrescence removed by ligature, without r
turn of the disease. I have known very striking effects follow th
internal and external use of medicine for tumors which for the mo
part are regarded as incurable, and which are passed by without e
citing any remedial regard. Sir Astley Cooper somewhere speak
of the professional negligence of these diseases. Is it right to abando
their subjects, simply because such diseases have got a bad name
I have always treated them as I would other diseases. My attend
ance on them has been regular, and means have been put into use
The attendance has ceased, because at length it has appeared ob
vious that no benefit was coming of treatment, or the patient, or mor
frequently her friends, have thought farther care, or farther expense
unnecessary.

I will, in more or less detail, refer to some cases of reputed malignant diseases of the womb, and of its appendages, which have come under my notice, and for which means have been used, with a view to curative agencies.

Cases of Cauliflower Excrescence.

Case. I.—Mrs. ———. Tumor small, insensible, springing from the os uteri. Drain of *watery fluid* from vagina constant and great; occasionally hemorrhage; much exhaustion, and evident sinking from disease. A ligature was applied round the tumor. It came away, bringing a few shreds only of what it had surrounded. Discharge ceased. Upon examination no tumor was to be discovered. The os uteri from whence it sprang, was found healthy. Strength returned, and the patient after a time left the city without complaint. I have not heard of her since.

Case II.—Mrs. M———. The history of this case is very much the same with that above given. There was an insensible tumor springing from the os uteri, irregular in its outline, or rough from small projections. *Watery drain* constant from vagina—at times hemorrhage. Ligature was applied, and in a few days came away, bringing scarcely anything with it. The noose had sticking to it some very small remnants of the large tumor which it had surrounded. This woman recovered perfectly.

Case III.—Mrs. ———. This woman had a tumor like those above described, and with like symptoms. She died exhausted by discharge of water and hemorrhage. I saw her after death. Scarcely any appearance of tumor was discovered. In this case ligature was not applied.

Case IV.—Mrs. K———. I was desired in December, 1846, to visit Mrs. K. I found her in bed, thin, pale and sallow, and apparently suffering from some chronic and exhausting disease. She said she was over 40 years old, had been married ten years, and had never had children. Her complaint, she continued, was a tumor of the womb, which was of more than a year's notice by her. At times much hemorrhage occurred from it, and at all times a *watery* discharge. Of late this had become so great as to exhaust her exceedingly, and she thought that it would be impossible for her to survive many weeks if it continued. It was sufficient to wet forty large towels a week, sometimes eight in a day. It was water, without colour, without smell, and without mucus. The disease was in no sense, or in itself, a painful one. It pressed against the sacrum and produced pain in that bone, and it obstructed much the rectum, and so troubled its functions. She added, that within a short time emaciation had rapidly increased, and her strength had failed. She wanted to live. She would endure anything that she might live. I have heard the desire to live expressed by many, and when death was near at hand by cause of sudden diseases, or accidental occurrences, without precursory disease; but I never heard it utter itself with such emphasis as it spoke from that woman. She had a face which expressed in the strongest manner her whole feelings, and

having passed her hand over it as if to remove from it whate
might diminish the power of what she had to say, bent her eyes u
me as I leaned over the foot-board of her bedstead, and said, "H
you the heart, Sir, to do an operation which may save life, thoug
be at the risk of taking it? That is the question which I w
answered, and in the most distinct manner." I said that I believe
was equal to my whole professional obligation, and would state to
what might be my duty specially to her, after I had learned by an
amination what was her disease, and that I would act as that d
seemed to me to demand. She said that her case had already b
examined, but no operation recommended, but she could not yet g
up. She begged me at once to make the examination which wa
settle the course I was to pursue.

Upon examination I found a tumor filling the vagina, and wh
was most developed in its sacral aspect. It was hard and perfe
insensible. It was not regular in its outline, but had projecti
and superficial, and deep sulci between its rounded and ridge-l
inequalities. It was of a greyish colour, and the discharge fro
was an inodorous, colourless water. I said I saw nothing in
character of the tumor to forbid an operation. I described to her
operation, the ligature, and stated that it would give her little or
pain. I learned that a professional friend of great surgical knowle
and reputation had been asked to see her, but had not called,
said that I would request him to see her, as I wished to have
opinion of the operation I had in view. He called the next day,
wrote me that he thought the tumor presented no objections to
ligature, that an operation in the case might be done, but that
flammation might follow, and the tumor might re-appear. T
opinion was stated to Mrs. K. She determined to submit to the op
tion, and to abide the issue.

A ligature was passed round the tumor, in the close of Decem
and it was purposely applied as high as it could be done. It was
found so easy to do this as was supposed, and as those who ne
made the attempt may imagine. The tumor filled the vagina.
was exceedingly irregular in its outline. The double canulæ
Gooch was used, and easily carried along the fingers, to the roo
the tumor. The attempt now to separate the two, by keeping
fixed, and sweeping the other horizontally round the tumor, was
barrassed by many obstacles. It was at length done, and the si
clasps carried along the tubes to make them again one instrum
The ligature was now drawn tight and secured. Some pain follo
this part of the operation, but soon subsided. It resembled the d
ging sensation which I have heard complained of in other cases.
next day I found the instrument very far out of the vagina, and u
examination discovered that the ligature did not embrace the whol
the tumor, but had been carried by the canula into one of the d
depressions of the tumor, instead of encircling the base. I state
thus particularly, as a caution in applying the ligature round ute
tumors, especially malignant ones, which are much more apt to

irregular in their outline than are the non-malignant. Said a physician who very kindly assisted me in this operation, let those who are astonished at a failure in doing such an operation try to do it themselves, and they may learn that there are difficulties in the way they hardly dreamed of. The ligature was now removed, and then applied again, and with entire success. It was tightened every two or three days, and each time showed that there was a gain on the tumor. Some days the ligature could be drawn an inch before it stopped. Generally not so much. There was always pain on drawing the ligature. It, however, was never a permanent pain, or of any long continuance. An opiate was often given to remove it, and doubtless made the time of suffering shorter. The instrument began at length to project farther and farther from the vagina. The ligature showed by its length that very little of the tumor remained encircled by it. I now examined the vagina, and found it empty. I could feel nothing but the canula, and a small loop of ligature encircling a portion of the original tumor which had not disappeared. The os uteri, excepting this spot which looked to the sacrum, was perfectly smooth and even in its outline, not a shred of tumor remaining except at the point referred to, and this was firmly within the grasp of the ligature. There was no discharge from the vagina. There had been scarcely any since the ligature was applied. What discharge did take place was the liquified tumor as it was cast off by the living textures from which it had been separated by living agencies. Nothing like a tumor had been thrown off. The ligature was now daily tightened, and I daily looked for its coming away. On the twenty-second day from the use of the canula, I found Mrs. K. in unusual spirits, and hiding something under the bed-clothes as I entered. I asked what it was. She at once drew out the instrument, which she said had come away that morning, and which she was now rubbing very carefully to restore to it its original brightness. I asked if anything had come away with the ligature. She replied, yes, and showed me a thin small mass, like dense membrane, on a towel. Upon examination I found that portion of the tumor remaining, round which I felt the ligature, of the size say, of one joint of the thumb, projecting from the posterior lip of the os uteri. I asked how it happened that the instrument had come off before separating the tumor. She said that she felt a strong desire to rise from bed to evacuate the bowels, and that, in suddenly moving, the instrument had been caught in the bed-clothes and was torn away from the vagina, giving her exquisite pain. I made no attempt to re-apply the ligature, for such was the stiuation of the remaining portion of the original disease that I did not believe that a ligature would hold on it.

Mrs. K. now rose from bed. Took exercise. Got excellent appetite. Gained flesh, and felt well. Not the smallest drain occurred from the vagina of water, of pus, or of blood. Her feet and ankles swelled, but at length this swelling disappeared. But after some weeks signs showed that the disease had returned. There was again water, and blood, and pain. She began to fail, and in five months

after the operation she died. To the last she never regretted
operation. It had lengthened life and enabled her to enjoy
Cheerfully would she submit again to the same measure, if it p
mised her the least chance of continued existence. I could offer
no inducements to submit to it. Her power of living was well n
gone, and she sunk and died.

Cases of Uterine Polypi removed by Ligature.

Case V.—Miss. S., aged 18. Came under my charge last summ
She was perfectly anæmic. I have seen many instances of this
ease, but in no one do I remember its physiognomy to have b
more strongly marked. The lips, gums, tongue, inside of chee
carunculæ lachrymales, nostrils, every texture was blanched.
had suffered from uterine hemorrhage for about four years. She
grown tall in that time, the time of growing, and was not emaciat
Other signs were palpitation on exertion or mental emotion, w
dyspnœa, a sharp, quick, and frequent pulse, pink-colored ve
ringing or rather buzzing in the ears, and a throbbing of the cerel
arteries, compared to the sound of the discharging pipe of a ste
engine. Stomach at times irritable. Great feeling of lassitude,
of exhaustion. The catamenial periods were attended by excess
flow, and in the intervals hemorrhage was frequent. She had b
recently examined, and a tumor projecting out of the os uteri di
nosed. Upon examination I found the tumor to be very hard, ins
sible and small, of the size of a sma l pullet egg. Hemorrhage
tended, and followed the examination. I could not reach the pedi
if the tumor had one. I was disposed to consider it as spring
from the cervix with a broad base. The ligature was applied.
tried different canulæ in this case, and though the tumor was not lar
I found the largest instrument to answer best.

Pain was produced by tightening the ligature. As soon as p
occurred, the ligature was fastened where it was. Some soreness
the abdomen was complained of next day, and the instrument w
not touched. The next day it was tightened, and pain again p
duced. Soreness of abdomen again occurred. I was satisfied t
the tumor was insensible, but the neck being very short, if any
isted, the strain of the whipcord was upon the womb, at the s
whence the polypus sprung. This explains the pain and the abd
inal tenderness. In about a week the tumor and instrument ca
away. The polypus was perfectly white. I scarce recollect
white an animal texture. From this time hemorrhage ceased.
catamenia became regular, and the patient is now perfectly w
The tumor was accidentally lost.

Case VI.—Mrs. W., aged about forty; has children. Has suffe
greatly of late from uterine hemorrhage, and the exhaustion induc
Of late she has been obliged to keep still, and in bed, as in this w
only can she prevent flooding. She suffers many of the sympto
given in Miss S.'s case, but not in so severe a degree. Within a f
weeks her case has become alarming, and her physician, upon
amination per vaginam, discovered a tumor projecting from the

uteri I was desired to see Mrs. W., and upon examination detected a tumor, in, but hardly projecting from, the os uteri. It was hard and insensible. It was closely embraced by the os uteri, so close that I could only pass a probe between them. It seemed very much as the glans penis looks in a severe case of phymosis. The woman was bleeding badly every day, but it was not possible to operate. It was advised to give her ergot in ten-grain doses, as often as five or six times daily, if her stomach would bear it. This was done, and pains in region of womb produced, and after a few days I found the tumor so much out of the womb as to allow the use of the ligature. It was applied. Hemorrhage at once ceased. Pain in the womb and abdomen was produced by tightening the cord, as in Miss S.'s case. But no untoward complication ensued, and in four days the tumor came away; since which, Mrs. W. has done perfectly well. The tumor was very firm and of a deep red color.

Cases of Ovarian Tumor.

Case VII.—Mrs. ———; married, has children. I saw this patient with Dr. Hanaford, A tumor, filling most of the lower part of the abdomen, presented itself. It was unequal in its outline, as if composed of many tumors. It was felt in the vagina, and so far filling it as to press the neck of the womb firmly against the symphysis, giving much trouble in passing urine. The uterine periodical function continued. Much suffering attended this disease. At times acute inflammatory attacks. The health had sunk, emaciation had occurred, the situation of the patient seemed hopeless. In its treatment constant efforts were made to sustain the patient while means were used to keep inflammatory processes in check, and to prevent increase of the tumor. Leeches, vesication, iodine ointment, hydriodate internally, sol. muriate of lime, &c., were among the means employed. At length a new symptom showed itself, which was the precursor of recovery. An involuntary and copious liquid discharge took place from the rectum. Some of it was collected in a vessel and examined. It was a perfectly transparent, dense, gelatinous liquid, very adhesive, and having a distinct albuminous odor. There was not the least trace of fecal smell in it at any time. The discharge went on. The tumor grew less. The pains which Mrs. ——— had so long suffered, ceased. She regained appetite, strength, flesh, and is now well. Is not this case of some interest in this regard, that it shows how a disease of the ovary, consisting of a fluid deposit, and threatening life, may disappear, and recovery happen, where opportunity is offered for a constant discharge of the fluid as it forms. The sac or sacs thus have an opportunity to contract. New processes occur in them from exposure to the air, and at length the sac disappears. What is done by a rude surgery, the pulling away, or cutting away the sac, or removal of the tumor by excision, is done by a gentler and wiser hand, and recovery follows. May not the ovary be punctured through the rectum, or vagina, and the natural surgery be thus in some sort imitated?

Case VIII.—E. L., about 30, unmarried. Has a large tumor oc

cupying one side of the abdomen, extending from the right iliac regi
beyond the median line towards the left, and above the umbilicus. Tum
apparently solid. I say apparently, for it is not easy to diagnose t
liquid contents of such tumors, if liquids be in them, especially if t
walls be thick, and the cavity within be formed of two or more no
communicating sacs. Examination per vaginam discovered a sol
tumor filling most of the pelvis, and which seemed to be a part of t
general mass above described. This patient suffers much from h
disease. At times the bladder and urethra are so compressed th
urine cannot pass. At times the rectum is obstructed. The result
most severe pain and distress throughout the abdomen. The troub
here is spasmodic, and at times exactly resembles violent colic.
the intervals of these attacks she was able to do some work in
family, to walk the streets, &c. She had for some time been engag
to be married. A desire had been manifested to have the e
gagement broken off. I was consulted. I gave an opinion decided
in favor of the measure; and had there been a legal question raise
I should have felt it my duty to state that such an "impediment"
use the word in its ritual technicality) existed as made the state
marriage improper. I remembered well a case of recent marriag
in which the husband desired my advice on account of important d
ease, not known to exist before marriage. I discovered that a tum
absolutely filled the whole cavity of the pelvis, and which, if it co
tinued to grow, would in no long time be seen externally.

I began an active course of treatment very soon after I saw th
case of E. L. The diet was regulated, so was exercise and re
Iodine ointment was constantly applied over the whole extent
tumor; and sol. mur. lime was steadily given. She took of th
larger doses than has any other patient to whom I have prescribed
The dose amounted at last to about three hundred drops, three tim
a-day. Leeches were used whenever pain existed in the tumor, a
occasionally counter-irritation was employed. This course was pe
sisted in for a long time. The tumor gradually diminished. Th
was ascertained by careful admeasurement. The strength returne
She gained flesh. She has for a long time passed from my profe
sional care, but I occasionally see her, and always learn that she h
no complaint. I have made no examination for a long time; but
feel sure that if the disease had become active again, I should ha
known it.

Remarks.—Mrs. K.'s case, No. IV., occupies a large space in th
record. It was a case of much interest. It involved some importa
principles. Are we authorized to operate in such cases? How f
are we to be influenced by our patient in deciding such a questio
Here was entire faith in what was to be done. It was faith in it
the only means of life—offering the only chance, however faint, th
was of good. It was associated with an intense desire to live. T
disease, called by C. M. Clarke and others malignant, has within
few years been successfully treated by ligature. The immedia
effect of ligature in this case was good. It lengthened life, and ma

life comfortable. I do not recollect a circumstance in this case which brings with it any regret that the operation was done. A question has been asked above, how far shall the physician be influenced in his judgment in treating disease by the demands, or wishes of his patient? As a rule, and the demand existing by itself, there being nothing in the case which promises good from any known agencies, he is not to be influenced at all by the wishes of his patient. But cases do occur which form, or are regarded as exceptions to the rule, and the physician is, and will be, governed by them. I remember, when a hospital pupil, a sailor entering the hospital for an affection of the heel which renderd him perfectly useless, and for years, under all sorts of treatment, had made him a great sufferer. He came to have his leg cut off. He had hobbled over the country, and applied for the *radical* treatment in vain. His leg, heel, foot, all, had not the slightest appearance of disease about them. His demand was heeded, his request granted, and he had the operation done with apparently as little suffering, certainly with as little complaint, as if he had been under the fullest power of ether.

I remember another case. It occurred in Scotland. An unmarried woman had a swelling of the abdomen of great size. It troubled her extremely. It did so principally in preventing her getting employment, she being supposed pregnant. This was a sore charge, and most grevious in its consequences, for she depended on work for her living. She roamed about to have an operation done on the abdomen, by means of which a large tumor, which surgeons regarded her trouble to be, might be removed. She applied in vain, till at length Mr. Lizars, then of Edinburgh, consented to do the operation. An incision was made of great extent, into the peritoneal cavity. ***But no tumor was found.*** The abdominal intumescence was owing entirely to a very large deposit of fat in the walls of the abdomen, and a very fat omentum.

In deciding the question of an operation in the cases referred to, the surgeon acts upon his own responsibleness, and his sense of this must determine for him what the practice must be.

A word more. In cases V. and VI., of polypi of the womb, it is said that pain was complained of when the ligature was tightened, and that soreness of the abdomen followed. The same was said of tightening the ligature in Mrs. K's. case. Now these three tumors are *insensible*, wholly so, certainly were they in the cases referred to. Whence, then, the pain? I have already answered this question, by supposing that it happened from the nearness of the ligature to the proper substance of the womb itself. The tumors had no pedicles. They sprung from broad bases, and the ligature was applied very near to the base. The womb, though no portion of it was included in the ligature, did receive pressure from the ligature applied so near to it. Now it is not important that the ligature should embrace polypi round the pedicle, or very near the base, especially in cylindrical or globular polypi which have no pedicle. If the ligature be applied at such a distance as not at all to affect the womb, the *whole of the*

tumor will drop off, just as does the whole of the umbilical cord, l us leave what amount we may adherent to the abdomen.

But if the pain on tightening the ligature be such as to attra regard—if it be accompanied by the constitutional or local symptor of uterine or peritoneal inflammation, slacken or remove it at onc and treat the disease it has produced at once with appropriate rem dies. When applied again, select a spot more distant from the wom Make the pressure less severe if pain again accompany it. If the be no pain, make it firm enough to strangulate the tumor at once, as far as may be, as less constitutional trouble is apt to arise fro such an operation, than from a less perfect and positive one.—*Bost Med. and Surg. Journ.*

Prosecutions for Mal-Practice in the State of New York.

To the Editor of the Boston Medical and Surgical Journal.

Sir,—I saw, by a notice in a late No. of your Journal, that a ph sician in Delaware County, of this State, had been prosecuted f mal-practice in the treatment of a surgical case. Perhaps a bri history of the case, treatment and result, in connection with anoth of alleged mal-practice in surgery, disposed of last week, in the Was ington County Circuit Court, may not be uninteresting, if not instru tive to the medical profession.

In giving the report of these cases publicity in a widely-circulat medical journal, I trust the public interest may be subserved, and th junior members of the profession benefited. I desire not to wour the feelings of any professional man; and shall, therefore, avo giving the names of the physicians charged with the mal-treatme of the following surgical cases.

Some time about the 11th of September, 1845, two young me both "*posse men*," or in the employ of the State, during the late an rent difficulties, were wrestling; one of whom was about to be throw upon the ground, and in the act of falling, thrust out his left han which met the ground rather outwards and backwards from his bod receiving not only the weight of his own body, but in all probabili that of his antagonist; which resulted in a fracture of the extern condyle of the humerus, and a backward dislocation of the ulna. fifteen or twenty minutes after the receipt of the injury, the patie was placed in the hands of a young physician, who, I believe, r garded the accident a backward dislocation of the elbow.

By the testimony it appeared that he attempted to reduce it, directing one person to make use of counter-extension from the h merus, midway between the shoulder and elbow, and another indiv dual was directed to extend upon the fore-arm, by grasping the lim at the wrist; while the physician, by the aid of his own hands, e deavoured to crowd the articulating extremity of the humerus, situat in what should be the hollow of the arm, backwards. The extensio and counter-extension was applied while the limb was in the *extende* or *straight* position; and after the application of considerable forc for some little time, there was an apparent yielding, when the phys

cian would direct the limb to be slightly flexed, which twice resulted in something like a "chuck backwards." At last, on a third trial, extension and counter-extension was applied as in the other two instances, and the limb left nearly in the straight position, with little or no effort made to flex it. It was pronounced reduced; and the patient thought "it felt more like an arm." The degree of flexion can be pretty accurately estimated, when it is stated, that in order to make a sling sufficiently long to suspend the limb over the opposite shoulder, it required, or, at least, two handkerchiefs were tied together, and used in the ordinary way.

The physician saw the patient from time to time, for about thirty days; and up to near this period, said that "it was all right, or as near as it could be, except a little point of bone or process, which would come right by using the limb."

At the end of seven or eight weeks, the patient called on me at one of our Saturday cliniques at the Albany Medical College, with his elbow swollen, stiff, and in nearly the straight position. The lower end of the humerus could be felt quite distinctly at the fore part of the joint, and the olecranon projected unnaturally behind; in short, the ulna was, at that time, dislocated backwards. I made a vigorous, though unsuccessful, attempt to reduce it. In the great exertion employed to flex the limb, and the effort to dislodge the coronoid process from the olecranon fossa, the extreme point of the olecranon process gave way. The fore-arm, however, was brought to something more than a right angle with the arm, which would have been in a much more useful position, if, as we anticipated, a joint but little better than anchylosed, should be the result. By neglect on the part of the patient, and by the weight of the fore-arm, the limb at length returned to a state but little more flexed than at the time when I first saw it, and thus remained stiff and inflexible.

In something less than a year after the accident, the young man, by the advice of his friends (not medical,) commenced a suit for damages; charging, in his declaration, that the joint was then dislocated; that it had never been reduced, and consequently that he had, in a great degree, lost the use of his limb. That a backward dislocation of the ulna existed at the time of the trial, neither the defendant nor witnesses pretended to deny, and that a great share of the difficulty and loss of the use of the limb was to be attributed to the dislocation.

The counsellor for the plaintiff endeavoured to show, that the malpractice consisted in the fact, that the defendant did not make use of the most common and best means to reduce the dislocation; and that no evidence, at the time of the attempted reduction, was had, to show that the dislocated bone had been replaced.

One of the first questions put, on the part of the prosecution, was, "What is the present condition of the elbow-joint of the plaintiff; and what was the original nature of the injury?" All agreed, that there was a fracture of the external condyle, which presented its proper relation to the head of the radius, and that there was a dislocation of the ulna backwards. Some of the witnesses thought that the

coronoid process of the ulna was broken off; and others, that the frac ture, which carried away the external condyle, extended through th trochleal articulating surface of the humerus, so that by the action o the muscles, the coronoid process (provided that it was not broke oft) was drawn, as it were, between the fragment and the continue shaft; or, in other words, that the articulating surface of the hume rus was not sufficiently broad to sustain the ulna, after having bee brought into its proper place. These two points, together with a fee ble attempt to show that the patient had been imprudent in walkin about too soon; in permitting a friend or nurse to dress it; and i riding on horseback, constituted the chief grounds of the defence.

On the part of the prosecution, after inquiring into the condition o the limb, nature of the accident, &c., the question was asked, "Wha is the evidence of reduction of a dislocated limb or joint?" All th witnesses, both for prosecution and defence, replied, "restoration o the form and shape of the joint, and freedom of motion.

The next question asked, was concerning the proper mode an means to be employed in reducing a backward dislocation of the ulna and without a single exception, all replied, that it would be prope to apply extension and counter-extension while the elbow was in *flexed* position. This principle was too *obvious* to be denied, or cor troverted, from the clear and conclusive demonstration made by th aid of the os humeri and ulna. By flexing the joint, the coronoi process was brought out, and forward from the deep olecranon foss and by extending it, it was made to lock into the deep olecrano fossa, and there retain its hold with great firmness.

The book authorities, with the exception of a single case given b Sir. A. Cooper, in his work on Dislocations, direct that the lim should be *flexed*, as by bending the joint around the knee, or aroun a bed post. It was agreed by all the medical witnesses, that if th limb was *flexed*, and, at the same time, if a *separating* force were a plied to the extremities of the two bones involved in the dislocatio whether by the hands, or in any other way, such a dislocation as th under consideration might be reduced.

Another question asked the medical witnesses, was this: "If th coronoid process be broken off, would it not be proper, and the a thorized practice, to place the limb in the extended position; would it be correct practice for the treatment of the fracture, esp cially if there had been a backward dislocation of the ulna?" Th question was also asked, "Should the limb be placed in the *sem flexed* or *flexed position?*" To the former question all answered i the negative; and to the latter, the same reply was made by all th physicians, with the single exception of a young man who was the practising dentistry, and who testified that he was a graduate in med cine; had attended lectures in New York; and had there receive instruction in the lectures of the Professor of Surgery to treat fractu of the coronoid process of the ulna, by placing the elbow-joint in th *semi-flexed position.*" I find no authority for this practice in an surgical work with which I am acquainted; nor have I learned th

such is the doctrine taught in any other medical institution out of the city of New York. Perhaps the young surgeon might have been mistaken, or misunderstood the direction of his teacher. If so, I presume that the distinguished and able surgeon of New York, under whose instruction he claimed to have received such direction, will notify him of his mistake, and put him right upon this important principle.

Another question put on the side of the prosecution, was this. "Provided the coronoid process be broken off, and the ulna dislocated backwards; and provided, also, it had been reduced, in which position, whether in the *extended* or *flexed*, would the ulna be most likely to remain in its proper place?" Here, too, the universal answer was, "in the flexed position."

The above are the most essential and important facts as developed on the trial, by candid and fair witnesses; and the result was a verdict for the plaintiff of $450.

The prosecution was conducted in a most scientific and able manner by A. Tabor, Esq., of this city, assisted by the Hon. Mr. Wheeler, of Delaware County. Mitchell Sanford, Esq., of Greene County, conducted the defence, assisted by A. Parker, Esq., of Delhi. Mr. Sanford, who addressed the jury, displayed his usual tact, ingenuity and eloquence, in endeavouring to convince the minds of his hearers, that the young physician had neither done wrong, nor had neglected to do any thing that ought to have been done.

The Hon. Amasa J. Parker, of this city, the Circuit Judge, before whom the cause was tried, gave a brief, though clear and impartial charge, stating that the jury were to be governed by the law and the facts in the case before them. The principle of law, applicable to the case under consideration, was fully explained; and as the testimony to the facts in the case was so fresh upon the minds of the jury, he deemed it altogether unnecessary to repeat it.

In most of the prosecutions of physicians and surgeons for mal-practice, it is fair to presume, from a pretty extended observation, that they originate in, or grow out of, an unwarrantable rivalry, or perhaps jealousy, between two neighbouring practitioners. In this case no such cause existed; on the contrary, it would seem as though all the medical profession, who testified on either side, were willing and anxious to protect the defendant, and the medical profession, so far as they could consistently with the solemn responsibilities of an oath resting upon them.

The report of the Washington County suit for mal-practice, may be expected next week. ALDEN MARCH.

Albany June, 1847.

Accounts of a New and Fatal Epidemic that Prevailed Recently in Mississippi and Tennessee. By B. J. HICKS, M. D., of Vicksburg, Miss., and B. F. TAYLOR, M. D., of Whiteville, Hardeman County, Tennessee.—(It is a remarkable coincidence that we should have received about the same time the following communications, evidently

describing the same curious disease, as it prevailed at localities nea 300 miles apart. It will be seen that Dr. White gives no name the strange affection; whilst Dr. Hicks calls it *myelitis petechial* We are satisfied it is the *cerebro-spinal meningitis*, which prevai during the last year in Ireland and some parts of Europe—an in resting account of which may be found among our Foreign extra in the present number, taken from Ranking's Half-Yearly Abstra vol. 2, No. 2, p. 192. Upon enquiry, we learn that several cases a similar nature were seen in this city in the early part of the sprin and on reflection, we are inclined to think it was the same dise that killed so many of the 2d regiment of Mississippi Volunteers they passed through this place in January last. We think it evid that neuralgic and spasmodic affections have increased greatly in south within a few years past.—Eds.)

Editors of the New Orleans Medical and Surgical Journal.

Gentlemen:—In the neighborhood of this village we have had epidemic that has proven to be one of the most formidable, probab in the records of medicine. It appears to have been more preval near Hatchie river, than in any other section of the country. T disease has been confined principally to children between the age six and fifteen years. The attack is ushered in with cold chilly s sations, after which moderate heat of surface, pain commencing tween the shoulders, extending to the occipital region, rigidity of posterior cervical muscles, retracting the head considerably ba ward, as in *tetanus*. Delirium supervenes in an hour or two, c traction of the pupils of the eye, dilatation of the one eye sometim with contraction of the other, ptosis of the eyelids, ecchymoses un the eye and on the body, rigidity of the abdominal muscles, spasmo twitchings of the flexors of the extremities, and a disposition to ke the legs in motion from side to side alternately. A difficulty in panding the lungs, breathing through the nostrils principally, con pation of the bowels, and sometimes retention of urine. Stertor breathing comes on, and death soon closes the scene—such are general symptoms of the disease. It terminates its course in fr fifteen to seventy-two hours. I have known one case to terminate late as the twelfth day.

Almost every method of treatment has been devised and carr into effect; bleeding, emetics, cathartics, cold douche, cupping, m curials, blisters; after which opium, quinine, and stimulants. T system appears to be so excessively shocked that the recuperat powers are not sufficient to sustain the tottering fabric. The nec sary chemical change is not carried on in the lungs; the blood is decarbonized; consequently, from the phenomena manifested, we led to the conclusion that death is produced principally by *asphyx*

I will simply detail one case, the particulars of which will be fou highly interesting, illustrating clearly and conclusively the patholo of the disease.

Case.—I was called in consultation with my friend Dr. Durha

an old practitioner, in the night of the 30th March, to see a servant girl, aged 11 years, the property of John H., Esq. She was taken on Sunday evening, the 28th, and was seen the following morning by Dr. Durham. She was then delirious, conjunctivæ injected, pupils contracted, retraction of the posterior cervical muscles, twitchings of the flexors, rigidity of the abdominal muscles, hurried respiration, pulse full, but compressible, constipation of the bowels. A mercurial cathartic was ordered, and a blister to the nape of the neck, extending over the occipital region.

29th. Delirium ceased; there is still retraction of the muscles; medicine produced two evacuations; has passed a small quantity of urine; says she feels better. Ordered calomel and pulv. doveri.

30th. This evening I saw her the first time. Intellect clear, complains of pain in the hypochondriac region, retraction of posterior muscles, pupils contracted, the eye looks rather dull, tenderness on percussing the 2d and 3d dorsal vertebræ, restlessness, pulse quick and compressible, no fever, tongue of a dull red or purple colour around the borders, coated with a thin yellow fur and fissured, respiration quicker than natural, performed principally by the abdominal muscles, dulness on percussion over the right hypochondriac region, auscultation detected slight engorgement of the lungs, no purgative since yesterday. I advised that she should be cupped over the spine pretty extensively, and to have an active mercurial cathartic.

31st. The cupping relieved the muscular retraction; skin feels pliant, though there is increased heat of the scalp. In the course of the night it was thought proper by Dr. Durham to administer ʒi. tinct. opii camph. to relieve excessive abdominal pain. Bowels not moved; the anodyne had the desired effect. She says that she is better. Ordered ol. ricini and ol. terebinth., to be repeated in four hours, should it not operate.

When we were in the act of leaving, the mother came out from the cabin and desired us to come back and see her, as she was much worse. She stated that the patient had asked for a drink of water a few minutes previously, complaining on lying down of pain in the abdomen, and evacuated her bowels in bed. The pupils were contracted, pulse depressed, breathing stertorous. Death closed the scene in a few minutes.

I examined the body in presence of Dr. Durham, and the following were the appearances.

Sectio. Cadaveris, 18 hours after death.—The body was not thin, and there was a quarter to half an inch of fat covering the abdominal muscles.

Head.—The posterior integuments were swollen, both pupils were dilated. On removing the calvarium, a considerable amount of blood flowed from the sinuses of the dura mater. The arachnoid membrane adhered with moderate firmness to the surface of the convolutions.

While the brain was being removed, some two or three ounces of serum escaped from the ventricles, being a clear and transparent

colour. The weight of the brain was not ascertained, but it appea heavier than usual. The surface of the convolutions was much f tened. The base of the brain bore evident marks of inflammati The membranes covering the medulla oblongata and the cerebellu the right lobe more especially, were thickened and opaque, adher likewise pretty firmly to the fissures of Sylvius. The membranes the base were unusually vascular, but the substance of the brain self was not altered very much in colour or consistence. The me branes, more particularly, around the third nerve of the right si were thickened and more vascular than natural. On examining superior surface of the brain and separating the two hemisphe slightly, they gave way inferiorly. This was ascertained to a from softening of the lower part of the middle lobe of both hem pheres, as also a considerable portion of the corpus callosum. T corpora striata were very slightly injected and softened, particula that of the right side; the lining membrane of the ventricles was altered in colour. The brain, taken as a whole, excepting the pa mentioned, was natural.

Spinal Marrow.—On sawing the vertebræ, a considerable quant of fluid blood gushed out the moment the interior of the canal v reached. It appeared to be perfectly flooded and engorged. T membranes were evidently thickened and highly vascular. T spinal marrow was not altered in appearance, but, if anything, sof than natural. The substance itself was not injected.

Thorax.—On inflating the lungs, the cells were permeate throug out. There was no appearance of hyperemia or inflammation of t substance, or of the lining membrane.

The Heart contained within the ventricles a thick coagulum blood. The pericardium being cut through, about two ounces serum escaped. The valves were healthy and the artery was f from deposits.

Abdomen.—The liver was perfectly engorged with blood; an cision being made through its structure, the blood could be squeez from it as from a sponge. The gall bladder was distended and co tained a quantity of thick, black, bilious matter. The weight of t liver was 5¼ pounds.

The Kidnies were congested, but otherwise healthy.

The Spleen was large, but contained little blood in comparis with the liver.

The Intestines contained a quantity of thin greenish matter. The were a few spots of ecchymoses in the lower two-fifths of the iliu The small intestines contained a few large worms. The alimenta canal was otherwise throughout healthy. *The bladder* bore no ma of disease.

Such are the facts and history of one of the most malignant d eases that it has been my lot to witness.

I forbear making any remarks, as I have, I fear, trespassed up your columns already too much.

Very respectfully,

Whiteville, Tenn., April, 1847. B. F. White.

(In reply to a note requesting further particulars, the following were received from Dr. White.—Eds.)

The disease made its appearance on the 25th day of February, near Hatchie river. The region of country extending along Hatchie, from Bolivar to Estanaula, was the only section that was affected. No case that I am aware of, occurred more than six miles out from the river. Some fifty cases that I know of, have occurred. The ratio of mortality in my practice, has been three-fourths out of the whole number. Every case that was taken with the extreme violent symptoms mentioned, died. Towards the last, the disease lost its malignancy to a certain extent, like all epidemics. However, the last two cases that I saw, died. The first of these demonstrated the futility of the antiphlogistic, with the sedative plan. In the second case, no time was afforded for any plan of treatment. The system received such a shock that it could never recuperate. The following were the notes taken at the time.

Miss Nancy E., aged 15 years, taken on Sunday evening, April 4th; complains of pain between the shoulders; spasmodic retraction of the posterior cervical muscles; subsultus tendinum; pain in the head and limbs; delirium, with intervals of consciousness; some fever, face flushed, bowels acted once during the day. April 5th, Monday morning, complains of pain of the stomach, with occasional sickness; slight delirium. Family gave an emetic; acted pretty thoroughly; delirium relieved; bowels evacuated; took a dose of calomel. I saw her first on Tuesday morning, 6th April, and found her in the following condition: head elevated on pillows; complains of an intense pain in the forehead; pulse hard and pupils contracted. On percussing the spinous processes, there was found to be tenderness, more particularly over the 2d and 3d dorsal vertebræ; tenderness on pressure over the right hypochondriac region; tongue covered with a thick yellow fur, fissured and dry; breath offensive. Bled her to ℥xvi, took ten ounces of blood by cups from the spine. A blister to extend from the neck, over the spine to the sacrum. Proto-chlor. hyd. grs. x, acetate morph. gr. i, for a powder. A cold douche over the head. She has now fallen to sleep. To take sulph. magnesia, 1 oz. in four hours, should she be not evacuated. Wednesday, 7th. I saw her this morning at 2 o'clock; still complains of pain in the head; pulse 75; bowels have acted freely; rational; no subsultus; pupils still contracted, Ordered a cold dash over the head, venesection to ℥xviii; to take proto-chlor. hydr. grs. x, acet. morph. gr. i, followed in four hours by a dose of sulph. magnesia. In my absence, a professional friend was called at 2 o'clock, P. M. He prescribed a dose of calomel with morphia. I saw her at ten o'clock at night. Head relieved, very little fever, small red spots, not unlike ecchymoses have appeared under the left eyelid, and over the body. To have two drops croton oil, repeated in two hours, should the bowels not act freely. Thursday, 9 o'clock, 8th April, complains of her head, great restlessness, sighing; pulse 100. Bowels were evacuated freely, discharges dark and very offensive. Stertorous breathing came on, and death took place at 12 o'clock.

In reviewing this case, you probably may be led to believe that t opium brought on the stertorous breathing, and that the treatme was sufficient to have produced death. I have seen precisely t same thing occur where no narcotic was given. The fact is, that had almost lost confidence in any therapeutical agent. In those e treme cases, nothing appeared to be of any service. If any reme is of any service, it is most unquestionably the preparations opium.

I may remark, that in some of the cases that survived, the heari was not restored for some time. The function of taste also, w lost. In one little child I recollect that he could not tell any thi bitter from any thing sweet. Every thing was devoured with t same gusto.

Yours, &c.,

Whiteville, May 18th, 1847. B. F. White.

To the Editors of the New Orleans Medical and Surgical Journal.

Gentlemen:—Conceiving it to be the duty of every medical p lanthropist to contribute his mite towards the advancement of science whose object is the relief of human suffering and prolongi life, I transmit to you for publication, if deemed worthy, the follo ing observations upon a disease of most extraordinary charact which has lately prevailed in our city, to a moderate extent, but w great fatality. I submit them as taken from the bed-side of the si leaving the readers of your Journal to draw their own conclusio When the disease first made its appearance, with what industry a zeal did the physicians of our city search the medical periodicals half a century back, in order that they might receive some light an inheritance from the experience of our predecessors, to aid th in the diagnosis and treatment of this fatal malady, but in va hence, I offer no other apology for this communication, hoping may serve in a slight degree as a beacon, to aid some traveller throu the dark mazes of our profession, and to shun the errors which ha often prevented success.

The disease of which I speak, I shall call *myelitis petechialis*, the meaning of the terms will convey an idea of the most promine symptoms.

The patients were attacked with groaning, muttering deliriu chilly sensations, pallid countenance, extremities cold; which sym toms were soon followed by roving restlessness, flushed countenan frequent pulse, expression of the eye wild and frantic, surface of t body hot and dry, violent screaming when touched or spoken unable to answer questions correctly, to locate the pain or point the suffering organs; whilst sleeping, alternate pallor and flushi of the countenance were often observed, and violent inflammation the right or left eye was not an unfrequent occurrence. This c dition was followed on the second or third day of the disease w symptoms of tetanus, the spinal muscles being very much contract and rigid; in some instances to such an extent that the patients we

enabled to swallow even fluids with much difficulty, accompanied with a loss of power in either the right or left upper and lower extremities, followed by convulsions of great severity, which would be excited or called into action by touching or raising the inferior extremities as quick as the operations of a galvanic apparatus. During the existence of this disturbed state of the nervous organism there was no evidence of lesion existing in the biliary or digestive organs, but great activity of the urinary secretions, being unnaturally copious and pellucid.

There was no uniform rule for the appearance of the various symptoms in this disease; in some instances the tetanic symptoms were observed as early as the first day of the attack, and in other cases as late as the tenth. In many of the violent cases, within six hours after the patients were taken ill, *petechiæ* of large size made their appearance upon the arms, over the eyelids and upon the inferior extremities, as if a violent hemorrhagic effort had been made and the blood arrested under the cuticle. These *petechiæ* disappeared on the 4th or 5th day, if the patients were not sooner cut off. In the most violent cases, death ensued on the 5th day of the disease; in other instances they survived from thirty to fifty days; but few cases recovered after the symptoms of tetanus presented themselves.

In consequence of a doubt existing in regard to the pathology of the disease, the treatment was pursued with a cautious and timid hand. The stimulating and anodyne course of treatment did not avail, and bloodletting was equally unsuccessful. The course which was of most promise, was of a mixed character. In vigorous constitutions, blood-letting in the onset of the attack, followed by an active mercurial cathartic, was of great service. If the patient should be of a more delicate constitution, cupping the whole length of the spine and early vesication by the use of the newly invented blistering tissue, or the unguent cantharides, would be preferable to the general bleeding; revulsives to the extremities and iced cloths to the head, together with the internal exhibition of the following mixture, greatly aided in advancing the case.

℞ Pulv. gum. camph. ʒj.
Potassio tart. antimonii, grs. ij.
Mucilage gum. acaciæ, ʒvi. M.

Give one tablespoonful every two hours. An enema composed of ʒij. spir. terebinthinæ, ʒij. tr. assafœtida and a half pint of thin starch was administered morning and evening, with a view of tranquillizing nervous distress, and keeping the bowels gently open.

After the violence of the disease had abated, the most beneficial tonic for relieving the inertia of the nervous system, which occurred in every instance of recovery, I found to be the following.

℞ Iod. ferri. ℈j.
Iodine, grs. viij.
Iod. potassæ, ʒij.
Syr. sarsapar. ʒiv.

Give one teaspoonful every four hours in a little water. This pre-

scription should be continued for some days, unless found to produ
gastric distress; then some mild bitter vegetable infusion should
substituted.

The pathology of this disease may be stated in a few words. T
brain and spinal marrow being the great centre of the nervous s
tem, any injury done to its substance by mechanical violence or oth
wise, must necessarily derange the functions of all of the organs
the human machinery which depend upon their sane condition
the healthful elimination of the vital fluids and the depurative p
cesses that are necessary to keep the organism in a condition suita
for the purposes of maintaining the proper operations of the who
and when such important functions are so interfered with, the t
dency is consequently to a cessation of that nervous power or e
tation which is necessary to carry on the operations of vitality.

In the disease in question, there is a positive injury existing wit
the spinal canal; congestion and inflammation of the spinal marr
and its membranes, which, if not speedily arrested, terminates in s
ening of its substance, which must be necessarily fatal. This c
dition of the spinal marrow has been produced by the sudden c
rations of meteorological changes made upon the nervous expansi
of the skin, which impressions are transmitted to the opposite
tremity of the nervous apparatus through the medium of the ner
themselves, they being the natural conductors of sensations, at wh
point morbid action is excited and continued until lesion takes pl
if not prevented by timely treatment. The pathology of nervous
eases has been too much neglected; the operations of the nerv
system are much modified by the electrical condition of the at
sphere, and the treatment of this particular class of diseases will
unsatisfactory until more attention shall be paid to this partic
study. The nervous system is more involved in the diseases of
climate than has been conceived of by medical writers. In inter
tent fever we may bleed, blister and give alteratives, and we can
cure the disease until we administer some remedy that will breal
the morbid chain of nervous action, and keep up a proper equilibr
of the vascular system. What is the first organ upon which disea
action locates itself in the fevers of our miasmatic district; is it
the expansions of the nervous system? Do we not see shiver
and manifest derangement of nervous action before congestion
the spleen, liver and other organs take place, and the consequen
attendant upon such conditions? Should the energy of the nerv
system be of sufficient force, the equilibrium of the circulation wo
be maintained and no congestions could ensue.

B. J. Hicks, M. D.

March 31st, 1847. Vicksburg, Mis

(In reply to a note requesting farther particulars, the following
ter was received from Dr. Hicks.—Eds.)

Vicksburg, May 11th, 184

Gentlemen:—Yours of the 7th instant, has just come to han
The disease I gave you a partial account of under the head of *m*
tis petechialis, made its appearance in our city and its vicinity a

the 10th of January last, and continued until the close of March; during which time between forty and fifty cases occurred, at least one-half of which proved fatal. No case to my knowledge recovered after decided symptoms of tetanus presented themselves.

Only one opportunity occurred in my practice of making a post-mortem examination, which, on account of press of business, was a hurried one, and consequently no organ was examined, except the brain and spinal marrow.

The cerebrum and cerebellum showed no symptoms of inflammation. The medulla oblongata and upper portion of the spinal marrow presented dots of blood when cut into, and the meninges of the same were found to be highly injected. I regret that I did not make a more perfect examination of this case, as no subsequent opportunity presented of investigating the pathology of this interesting disease.

Yours, &c.

B. J. Hicks.

On Exudation.—Its Development.—By John Hughes Bennett, M. D., F. R. S. E., Lecturer on the Pathology, and the Practice of Physic; Director of the Poly-Clinic, at the Royal Dispensary, Edinburgh, &c.

Enclysted Growths.—The different crypts and follicles of the skin, and mucous membrane, as well as several of the excretory ducts of internal organs may become obstructed, and as a consequence enlarged and hypertrophied. It is true such growths usually consist of one or more elementary tissues, and should not on this account be constituted a class of themselves. Their importance in a practical point of view, however, as well perhaps as the difficulty of knowing where to describe such compound growths, warrant our speaking of them under a separate head.

Encysted growths are composed of a cyst or membranous envelope, enclosing various kinds of contents. They differ greatly in size, situation and structure, which renders their arrangement somewhat difficult. By some they have been divided into *simple* and *compound*, according as the tumour is formed of one cyst, or is composed of several. By others they have been arranged according to the nature of their contents into *hygromatous*, or aqueous; *atheromatous*, resembling gruel; *melicerous*, honey-like, and *steatomatous*, or fatty encysted growths. The latter mode of division is very faulty, the atheromatous, melicerous, and steatomatous varieties being all more or less fatty, whilst some kinds of compound encysted tumours contain different contents in different cysts. But as there can be no doubt that the peculiar contents give to these growths a distinctive character, we shall first speak of them as simple or compound, and then describe their different kinds of contents.

Simple encysted growths.—These growths are formed of a cyst composed of fibrous tissue, lined by a smooth membrane. Sometimes the membrane is structureless, or only composed of areolar tissue. At other times it is lined with a distinct layer of epithelial cells, the nuclei of which are very apparent on the addition of acetic acid. The

former kind constitutes the vesicles so frequently found in the plex choroides, kidneys, ovaries, &c., varying in size from a pin's head that of a hazel nut, or even walnut, usually with aqueous conten The latter kind constitute the cystic growths arising in the follicles the skin, in the mamma, ovaries, testicles, &c., which frequently rea the size of an orange, are sometimes much larger, and vary great as to the nature of their contents. For the most part they are on sparingly supplied with blood-vessels, and seldom cause inconve ence except from the deformity they occasion when situated e ternally.

Compound encysted growths are of two kinds. The external s may contain on its internal surface secondary or even tertiary cys which may be sessile or pedunculated—or the growth may be vided into numerous departments by divisions of the fibrous sac. Th is the true multilocular encysted tumour. The external cyst in these cases is formed of fibrous tissue. The internal surface is smoo sometimes with, at others without an epithelial layer. The prima as well as the enclosed cysts are for the most part richly supplied w blood-vessels, and hence they are peculiarly prone to contain exud tion which has undergone various kinds of development, as well to ulcerate. These growths frequently attain an enormous si measuring several feet in circumference, whilst their internal me brane may secrete more or less rapidly gallons of fluid.

The *contents* of encysted growths are very various, and give, we have previously stated, a peculiar character to them.

1. The contents may be a perfectly colourless fluid, resembli water, or the limpid serum so frequently secreted in the lateral ve tricles of the brain. It is structureless, and chemically contains a n nute proportion of salts, and a certain amount of albumen whi coagulates on boiling. Such are frequently the contents of so-call serous cysts, or false hydatids of the plexus choroides, kidneys, o ries, &c. A *hydrocele*, and other dropsies of shut serous sacs, m be looked on pathologically as constituting a form of hygromato encysted growth.

2. The contained fluid may have an amber or golden yellow colo and resemble the serum formed after the coagulation of the blood. is still structureless, but contains a large amount of albumen, as proved by the action of heat and nitric acid.

3. The contents are more or less gelatinous, sometimes slightly like weak gelatine—at others firm, capable of being cut with a kn like tolerably strong glue or firm calves-foot jelly. The colour of t gelatinous matter may vary from a slight yellowish tinge, to a de amber, or brownish yellow colour. Sometimes this matter is stru tureless, at others it may be seen to contain very delicate filamen combined with pale oval bodies, the outlines of which become strong on the addition of acetic acid. This re-agent frequently causes t gelatinous mass to coagulate into a firm white fibrous structure, ca ble of being separated by needles, and presenting all the structure filamentous tissue. This kind of contents is common in the ovary, a we have seen it in the kidney and other organs. On one occasion t

gelatinous matter in the kidney, contained numerous granules, and more than once we have found in the centre of clear amber masses of it a creamy white substance, either wholly granular, or in the process of formation into pus corpuscles.

4. The cyst may be distended with epithelial scales, which have evidently been thrown off from its internal surface, and become compressed together, and partially broken down. Hence on examination, clusters of such scales may be found mixed with numerous debris, and fat granules and globules, sometimes with crystals of cholesterine. The contents of the cysts are usually of a white or slightly yellow colour, which is sometimes fluid, at others semi-solid. The *molluscum contagiosum* of dermatologists is thus constituted. The small cystic swelling for the most part originate in the crypts of the skin, which are more or less enlarged.

5. The contents may consist principally of fat, either amorphous, crystallized, or organized, that is cellular. If amorphous they resemble honey, constituting the *melicerous* growths of morbid anatomists. In many cases, however, where the yellow colour is uniform, when it breaks down under the finger and closely resembles honey to the naked eye, faint cell walls more or less compressed together may be observed by the microscope.

At other times the fatty contents are of a whitish colour, occurring in masses of a pearly aspect and smooth surface, mingled with a roughened yellowish, and more granular fatty matter. This white matter consists of numerous crystals of cholesterine placed in a close juxta-position,—the granular fatty matter of oil globules and granules, mixed with broken up crystals, epithelial scales, and sometimes the products of fibrinous exudation. Such is the general structure of the *atheromatous* encysted growths of various authors.

Again the fatty matter may be more or less lardaceous in character, and consists of beautiful round or oval cells, some of which are distinctly nucleated. Mixed with these may be a granular matter, combined with epithelial cells or their debris. At other times no distinct cells can be observed, only a granular or amorphous mass, the most part of which is soluble in ether. This constitutes the *steatomatous* encysted growth.

6. Many encysted growths contain hair and teeth. The hair is occasionally inserted into the walls of the cyst, at others exists loose, mixed with the fatty or other contents. They are exactly of the same structure as the hairs in other parts of the body, having distinct bulbous roots. When attached they are surrounded by a follicle in the lining membrane, when loose they have been evidently grown in follicles, and afterwards become separated. Their apices are frequently split up into several fibres in the longitudinal direction. The *teeth* belong sometimes to the first, and sometimes to the second dentition. They present on section the usual structure of cavity, with ivory, enamel, and bone. Sometimes they are found embedded in a follicle of the lining membrane, at others like the hair quite loose.

7. Occasionally the cysts contain lymph, softened fibrine, and purulent matter, composed of plastic, pus, and compound granular cells,

the result of exudation into their cavities. Occasionally the se
fluid is more or less mixed up with extravasation of blood, givin
the contained liquid various colours and appearances, according t
period the extravasation has taken place. Thus it may be red,
brown resembling coffee, of a dark greenish tinge, &c., &c. So
times it is of a dark bluish or blackish tint from excess of pigmen
deposit.

8. Sometimes the contents of the cystic growth are formed
solid exudation, which has undergone the sarcomatous transforma
as previously described, and wholly consists of fusiform cells.
exudation poured into such cysts may pass into the cancerous fo
tion, when the characters we have described will be associated
those yet to be detailed which distinguish cancer.

9. Some cysts contain the peculiar secretion of the organ in w
they are found. The cysts in the liver are full of bile, and thos
the kidney of urine.

The mode in which encysted growths are developed is gener
by the hypertrophy of pre-existing tissues, whereby canals are
tended, follicles or vesicles enlarged, and their walls thicke
Thus the simple cysts in the plexus choroides are owing to effusio
serum into the areolar spaces of the villi of the membrane, and
subsequent distension of the membrane. Those in the kidney
owing to the distension of uriniferous tubes above an accidental
struction, in the same manner that the whole kidney may become
cysted from obstruction of the ureter. In like way the crypts of
skin or follicles of mucous membranes become obstructed at t
orifice, and their contents accumulating, gradually distend the w
which become enlarged and thickened. Simple cysts in the o
become dilated by enlargement of the Graafian vesicles, either d
in the stroma of the organ, or on the surface, when they grow
wards and become pedunculated.

The origin of compound encysted tumours is not so well de
mined. It is very probable, however, that in most cases they
sist of clusters of simple cysts, which become compressed toget
and are at length surrounded by a capsule. They are most com
in the ovary; and here we can readily understand how succes
growths of Graafian vesicles may give rise either to the appeara
of secondary or tertiary cysts, or to the multilocular form we h
described. In all cases as the compound cyst enlarges, the inte
ones open into each other by ulceration. Hence, in very old c
pound cysts we find one large cavity, with the traces on its inte
wall of previously existing cysts, or bands and divisions, with pou
between them, indicating where previous cysts has existed.

Another mode in which compound cysts are formed is by
gradual enlargement of the areolæ in newly formed fibrous tis
On examining thin sections of sarcomatous growths, we observe
filamentous tissue arranged in a circular form, enclosing spaces v
ing in size from the $\frac{1}{10}$ of a millemetre, to several inches in diame
When of a certain size they are often lined by a distinct epithe
membrane, and many contain serum, blood, or exudation, either

granular or fibrous state. Such growths have long been known under the name of *cystic sarcoma.*

The diagnosis of encysted growths belongs to the *special* pathology of each organ affected by them, and will constitute the subject of a distinct communication. It need only be mentioned here that a knowledge of the structure of these tumours is not unimportant, as an examination of the fluids discharged from them frequently enables us to speak with certainty regarding their nature.

An acquaintance with the structure and mode of development of these growths must convince us that there are only two modes of *treatment* applicable—namely, 1st, entire extirpation, and 2d, destruction of the secreting surface in their interior. The idea that a dense fibrous envelope, often containing numerous secondary cysts, all richly furnished with blood-vessels can be absorbed through the agency of mercury, iodine, or any other drug, must be purely imaginary. Neither can it be supposed, that as long as any of the cysts remain intact, a cure can be hoped for. But we have seen that the natural course of these secondary cysts is to open into each other, until at length only one large cyst remains. Under such circumstances a rupture, by exciting adhesive exudation, and thus destroying the secreting surfaces, or inducing adhesions between them may cause a radical cure. It is in this manner that the occasional spontaneous removal of certain ovarian cysts are to be explained. In one such case, we had an opportunity of examining under the care of Dr. Makellar, the walls of the compound cyst were found after death shrunk and thickened, and the whole growth in process of obliteration.—*Monthly Journ. of Med. Sci.*

Principles of Treatment in Placental Presentations. By J. Y. Simpson, M. D., Professor of Midwifery in the University of Edinburgh.—In a late very interesting and very able paper, on unavoidable hæmorrhage, published in the Lancet for March 27th, I observed that the author, Mr. Barnes, argues on the idea that I recommended the complete separation and detachment of the placenta before the child, as a general rule of practice in all cases of placental presentation. Many other members of the profession appear to have taken up the same impression. I have always, however, maintained a very different doctrine. From the first observations which I published on the subject, up to the present time, I have upheld that the practice of detaching the placenta before the child, in unavoidable hæmorrhage, was a method to be had recourse to in cases where the other recognized modes of management were insufficient, or unsafe, or altogether impossible of application; and I have always looked upon this new method as possessing especial value, from its thus presenting to us a rational means of treatment in precisely those more formidable varieties of this obstetric complication, in which all former plans of practice were attended with extreme hazard or extreme difficulty.

As I am anxious to avoid future error and misconception on this head, I would beg leave here to take the liberty of enumerating briefly, and without entering into special details, the different general

principles of treatment which, in my humble opinion, ought to gu
our practice in this important and anxious class of cases.

Setting aside, then, those minor and palliative measures for
derating the attendant flooding that are generally adopted by pra
tioners in all cases of uterine hæmorrhage, where time permit
their employment, (such as quietude, the supine position, cold, &
I hold that our management of placental presentations, when ei
labour or such severe flooding as demands interference does at
supervene, should be regulated on the following principles:—

I. *In some cases no active interference is required.*—In place
presentations, we deem ourselves called upon to interfere operati
with the avowed object and purpose of saving the patient from
dangers of the attendant hæmorrhage. Hence it necessarily foll
that it would not be requisite to adopt any special form of artifi
aid or delivery, if, in any case or cases, this complication were
companied with little or no flooding. Now, in some instances of
tial presentation of the placenta, the flooding ceases altogethe
abates to a safe degree, when, during the natural progress of lab
the membranes rupture and the head descends. And in some
cases of complete presentation of the placenta, where the vasc
bleeding structure of the placental mass has become obstructed
obliterated previously to the supervention of labour, little or
hæmorrhage has accompanied the process of delivery. In othe
stances, before any operative aid can be applied, the hæmorrh
suddenly and entirely ceases in consequence of the placenta bec
ing totally separated, and expelled by the advancing head of the
fant. Under such circumstances, and others, where the presen
prospective dangers attendant upon operative interference would
evidently greater than the present or prospective dangers attend
upon the existing degree of hæmorrhage, any form of forced deli
would, I believe, be improper. But cases of placental presenta
in which we can thus leave the delivery altogether to Nature
rare. Generally, we require to adopt some active measures, with
special object of saving the patient from the actual or threate
dangers of the hæmorrhage. These measures should, I conceive
one or other of the plans which I have now to proceed to mentio
viz., 1, the artificial evacuation of the liquor amnii; or 2, the a
cial extraction of the child; or 3, the artificial separation of
placenta.

II. *Artificial Evacuation of the Liquor Amnii.*—In partial pre
tations of the placenta, rupturing the exposed portion of membra
(according to those principles that are generally followed in acci
tal floodings) is a measure which sometimes proves quite adequat
arrest or abate the hæmorrhage to such an extent, that the deliv
may be afterwards entirely committed to the effects of Nature. V
ous old authors, as Daventer, Deleurye, and Astruc, have descri
this same plan of treatment as applicable to complete, as well a
partial presentations of the placenta, with this difference, that in
complete variety, the liquor amnii is evacuated, not by punctu
the membranes only, but by perforating the opposing placental st

ture with a trocar, catheter, or other analogous instrument. And the later records of midwifery contain several cases in which this perforation of the placenta has, in complete presentations of the organ, been successfully adopted, both as regards the mother and the infant.

Several high authorities, however, in midwifery, have altogether repudiated the evacuation of the liquor amnii, both in partial and in complete placental presentations. They have done so principally under the idea, that if this measure failed to suppress the flooding, the previous escape of the waters would render any subsequent practice that might be required more difficult of execution. This objection certainly applies to turning, as a subsequent practice, but it does not apply to artificial detachment of the placenta as an ulterior measure of treatment.

The artificial evacuation of the liquor amnii, by perforating either the placenta or membranes, affords assuredly a simple, but by no means a certain, method of restraining the flooding in placenta prævia. It is a practice which is undoubtedly attended with less success in unavoidable than in accidental hæmorrhage. But still I believe it to be a mode of treatment, to which we may occasionally have recourse with great advantage, especially if there is originally a large quantity of liquor amnii present, and if the flooding is great, while the os uteri is still small and undilatable. We must beware, however, of trusting too much or too long to this, or to any mere palliative measures. Whatever we do, should, if possible, be always done before the hæmorrhage is allowed to proceed to such an extent as to induce any very marked symptoms of constitutional debility and depression in our patient. If a decided state of exhaustion has been allowed to supervene, either of the two remaining and ulterior measures—extraction of the child, or extraction of the placenta—will be but too liable to prove futile and unsuccessful in their results.

III. *Artificial Extraction of the Child.*—This forms the general principle of management upon which unavoidable hæmorrhage has hitherto been treated by most authors and practitioners. The professed object of the practice is this: by forcing the delivery of the child, and thus emptying the uterus, the organ is thrown into full contraction, and hence further loss of blood prevented. The mode in which the indication is fulfilled is in some degree regulated by the state of advancement of the infant, its presentation, &c. In a great proportion of cases the accompanying hæmorrhage requires interference at so early a stage of the labour, that the only proper and possible mode of delivery is by the operation of turning; and various authors, as Drs. Denman, Burns, Hamilton, Conquest, and others, speak of turning as the *sole* and *only* mode of treatment applicable to cases of placental presentation. The great objection to it is the imminent danger which the mother necessarily runs, from the risk of some laceration of the cervix uteri during this mode of forcible delivery; and any degree of laceration of this part is especially dangerous in placental presentations; for in placenta prævia the structure of the cervix is extremely vascular, being permeated with those numerous and

enlarged vessels which are always developed, in a high degre the uterine walls opposite the seat of the placenta. The laceratio these vessels leads to immediate danger, from draining hæmorrh after delivery, and to more remote danger, from inflammation b liable to spring up in the torn and wounded sinuses of this part, extreme uterine phlebitis following as a direct consequence. But I hold turning to be the proper mode of practice in unavoid hæmorrhages which cannot be restrained by less active meas and where immediate delivery is demanded, with the os uteri dilated, or easily dilatable, and the child still alive, or presen transversely.

Besides turning, other modes of artificial delivery of the infant occasionally resorted to in placental presentations. If the atten flooding is such as not to require forced delivery till after the w are evacuated, and the head well advanced in the passages, then sion would be dangerous and inapplicable, and the use of the for offers the safest and easiest mode of extracting the infant. Furth in original pelvic presentations extraction may be at any time effe when required, by seizing and dragging at the feet of the child.

V. *Artificial Separation of the Placenta.*—The arrestment of avoidable flooding by total detachment of the placenta should, I lieve, be our line of practice when the combination of circumsta is as follows—viz., the hæmorrhage is so great as to show the ne sity of interference, and is not restrainable or restrained by mi measures, (such as the evacuation of the liquor amnii;) but, at same time, turning, or any other mode of immediate and forcible livery of the child, is especially hazardous or impracticable, in co quence of the undilated or undeveloped state of the os uteri, the traction of the pelvic passages, &c. Or, again, the death, prem rity, or non-viability of the infant, may not require us to adopt m of delivery, for its sake, that are accompanied (as turning is) much peril to the mother, provided we have a simpler and s means, such as the detachment of the placenta, for at once comm ing and restraining the hæmorrhage, and guarding the life of the rent against the dangers of its continuance. Hence, as I have where stated, I believe that the suppression of the flooding by total detachment of the placenta will be found the proper lin practice in severe cases of unavoidable hæmorrhage, complic with an os uteri so insufficiently dilated and undilatable as no allow of version being performed with perfect safety to the mot therefore, in most primiparæ; in many cases in which placental sentations are (as very often happens) connected with prema labour and imperfect development of the cervix and os uteri labours supervening earlier than the seventh month; when uterus is too contracted to allow of turning; when the pelvis or sages of the mother are organically contracted; when the chil dead; when it is premature, and not viable; and where the mo is in such an extreme state of exhaustion as to be unable, with immediate peril of life, to be submitted to the shock and dangers turning, or forcible delivery of the infant. This enumeration is

from comprehending all the forms of placental presentations that are met with in practice; but it certainly includes a considerable proportion of the cases of this obstetric complication, and among them, all, or almost all, of the most dangerous and most difficult varieties of unavoidable hæmorrhage. In adopting the practice, one error, which I would strongly protest against, has been committed in some instances. Besides completely detaching and extracting the placenta, the child has subsequently been extracted by direct operative interference. If the hæmorrhage ceases, as it usually does, upon the placenta being completely separated, the expulsion of the child should be subsequently left to Nature, unless it present preternaturally, or the labour afterwards show any kind of complication, which of itself would require operative interference under any other circumstances. Both to detach the placenta and extract the child would be hazarding a double instead of a single operation.

Comparative Mortality attendant upon Turning, and upon the total Separation of the Placenta.—One circumstance which strongly led me to advocate, in unavoidable hæmorrhage, the preference of the detachment of the placenta to the operation of turning the child, was the fact of the great mortality which followed the latter operation, as contrasted with the few mothers that died when the placenta was spontaneously expelled, or accidentally extracted before the infant. In speaking of the relative maternal mortality resulting from the two modes of practice, Mr. Barnes very properly points out, that when I spoke of the mortality attendant upon the separation of the placenta before the child as amounting to one in fourteen only, (ten in 141 mothers having died,) I had included cases in which the placenta was thrown off spontaneously before the child, along with others in which it was artificially detached; and he doubts if the results would not be "widely different" if the statistics comprehended the latter class of cases only, "in which the severe operation of detaching the placenta, by the introduction of the hand, had been resorted to." The best answer to this objection consists in a statement of the results hitherto obtained from the practice of artificially detaching the placenta.

"Seventeen cases," says Dr. West, "have been recorded in the English journals, during the past fifteen months, of detachment of the placenta before the birth of the child in cases of placenta prævia. In the case recorded by Dr. Simpson, to whom it had been communicated by Mr. Cripps, the placenta was removed by an ignorant midwife, and ten hours elapsed before the child was born, during which time, however, no hæmorrhage took place. In sixteen out of the seventeen cases, the bleeding is said to have ceased immediately on the detachment of the placenta; but Dr. Everitt mentions, that although the flooding abated on the separation of the placenta, it did not entirely cease until after the application of cold externally; and he insists on the fact as proving, in cases of this kind, the hæmorrhage comes from the uterine as well as the placental ends of the lacerated veins. The life of the mother was preserved in every case but one, (out of the seventeen,) and then the previous hæmorrhage

had been so profuse as almost to exhaust the patient, who died th hours after delivery. All the children were still-born, except in case related by Mr. Stickings."

I do not stop to inquire whether in one and all of these sevent cases the artificial detachment and extraction of the placenta ough have been followed. At present I adduce them, not as affording dence of the propriety of the practice, but as affording evidenc its safety.

In proof of the maternal mortality under the old and recogni forms of practice being greatly higher than under the proposed p of the extraction of the placenta before the child, Mr. Barnes ref apparently with some hesitation, to the statistics collected by Churchill and myself, as showing that one in every three moth was usually lost in placental presentations. Among 174 cases unavoidable hæmorrhage collected by Dr. Churchill, forty-ei mothers died. I have now before me a carefully collected list of cases of placental presentations reported by Mauriceau, Portal, fard, Smellie, Rigby, Clarke, and Collins, Schweighauser, Lac pelle, Drs. John and Francis Ramsbotham, Lee, Lever, and Wils Among these 654 cases, 180 mothers died, or one in three-sixteen In corroboration of the correctness of the statistical view which Churchill and I have taken of the extent of maternal mortality in avoidable hæmorrhage, I would further beg to refer Mr. Barnes the observations of Dr. Robert Lee. In his Midwifery Lectu (pp. 370, 371,) published in 1844, Dr. Lee states a number of stati cal facts regarding uterine hæmorrhage from placental presentatio and, amongst other matters, he mentions the result to the mother a considerable number of cases. I shall throw all his evidence this last point into a tabular form.

Maternal Mortality in Seventy-two Cases of Placental Presentati noted by Dr. Lee.

Reporters.	No. of cases reported.	No. of mothers lost.
Dr. Clarke	14	1
Dr. Collins	11	2
Dr. Ramsbotham	19	8
Dr. Lee,	38	14
	72	25

Hence, according to Dr. Lee's collection of statistics, the mater mortality in unavoidable hæmorrhage, amounting to twenty-five seventy-two cases, is rather more than one in three. And this e dence of Dr. Lee will probably be regarded as the stronger, seei that it is totally unprejudiced in its character; for in 1845, Dr. L called into doubt the accuracy of all collections of statistical data ma by others, and which led to the idea, that the general maternal m tality in unavoidable hæmorrhage was so great, as to approach o in three. At that time he was, I believe, unaware of the general sult of his own previously published collection of statistical data re tive to the point in question.—*Lancet.*

THE

MEDICAL EXAMINER,

AND

RECORD OF MEDICAL SCIENCE.

NEW SERIES.—No. XXXIII.—SEPTEMBER, 1847.

ORIGINAL COMMUNICATIONS.

Otorrhœa. By JAMES BRYAN, M. D., Lecturer on Surgery, formerly Professor of Surgery and Medical Jurisprudence in the "Academy of Medicine," Castleton, Vermont, &c., &c.

The subject of otorrhœa, or a discharge, sometimes purulent, from one or both ears, is one of considerable importance, both to the patient and to the medical practitioner. The disease is very common, particularly in infancy and childhood. From being at first a discharge from the lining membrane of the meatus auditorius externus, affording relief to some other local irritation, and acting on the principle of *counter-irritation*, it becomes chronic, and is itself a disease.

In teething, ophthalmia, and other inflammations, nature very commonly establishes this discharge, which undoubtedly relieves these diseases.

From this fact, which is matter of common observation, both among the profession and the people, together with the aphorism which says, "Suppression of discharges from the ears, induces diseases of the brain," it is an every day affair to see otorrhœas entirely disregarded, and no means whatever taken to heal them.

So general is this, that individuals reach the period of puberty with this affection in one or both ears. The evil consequences of such continued disease, with a regular purulent discharge for years, (in one case lately under my care of thirty-two years) may

be easily conceived. The lining membrane of the meatus becoi thickened; the membrana tympani is destroyed; the bones of ear are loosened and discharged, the inflammation, as I have s in more cases than one, attacks the mastoid cells, and forms fi læ opening externally.

In some cases the progress of destruction is more summa and the disease, passing through the delicate organs of heari attacks the membranes and even the substance of the brain, p ducing *then*, and not till then, "convulsions" and death.

The latter termination, though by no means so frequen might be imagined from the proximity of the disease to the c bral organs, is yet sufficiently common to make the subject a m ter of grave consideration. At the same time it must be bo in mind, that this *introcession* is liable to take place at any ti during the existence of a chronic otorrhœa; and particularly i the case on exposure to a cold and damp atmosphere, or to a of the causes of colds or inflammations.

The evils, then, of the prolongation of this disease, may arranged as follows:

First. It is inconvenient, the fluids not unfrequently being v offensive.

Secondly. A permanently diseased condition of the mea auditorius is produced—or, the bones being attacked, we m have ulceration or suppuration established in the cellular str ture of the mastoid process, which may continue for a long ti

Thirdly. The destruction or ulceration, or what is *very co* mon, the thickening of the *membrana tympani;* the latter re being, not unfrequently, induced in a few days from an otorrh It is well known, in fact, that a very large proportion of individu who are supposed to possess good hearing, have partial deafn in one ear at least, and sometimes in both, from this cause.

The ulcerative process takes place rapidly in the delicate d phanous membrane of the tympanum; and although it has b shown by some good writers that the perforations induced ulceration, may, by proper treatment, be healed; yet where th is no treatment, and the ulcerations heal up in the ordinary cou of the disease, it is fair to infer, that the perforations remain life. I recollect when a boy, in company with others, boys a men, a common amusement among them was to blow sm from the segars they were using, *through their ears*. An considerable per centage of these individuals in a country vill could perform this feat. The destruction of the membrane its however, I suspect, is the most usual termination of the disea After this it not unfrequently gets well itself, and the dischar cease.

Fourthly. The ossicula auris are loosened and discharged, a

the fenestra ovalis is exposed to the contact of atmospheric air. The apparatus so important to good audition—viz., the membrana tympani and bones of the ear—being lost, the function must necessarily be very much impaired; in some cases the Eustachian tubes close, and in this way the external and middle ears are entirely impaired.

Fifthly. The possible, nay probable, occurrence of a transfer of the inflammatory action to the brain or its membranes, by metastasis or *continuous* inflammation, is an argument of the highest importance in this discussion.

Sixthly. The partial or complete loss of the function invariably accompanying the disease, should be inducement enough for us to investigate the propriety of allowing these discharges to continue, without medical interference.

The arguments in favour of non-interference may be summed up in a few words:

First. It is a diverticulum of nature which it is dangerous to interfere with.

Secondly. It very frequently (the object of nature being obtained) heals up itself, leaving no great derangement of the organ.

In reference to the first, we would remark that although a diverticulum, (or source of counter-irritation,) and in some cases protecting important organs, yet the seat of the discharge is itself an important organ, and no man would select *that* as the place to establish counter-irritation in the case of disease in any other organ, especially as it is well known that a purulent discharge from behind the ear, the back of the neck, or the arm, would be productive of all the good effects claimed for a discharge from this locality.

We might with the same propriety establish inflammation in the eye, for the relief of cerebral, dental, or aural diseases, and in this way impair or destroy the function of that organ, whose structure is so delicate, and yet no *more* delicate than that of the ear.

But, say the advocates of the do-nothing-practice, what are you to do? "Suppression of discharges from the ears induces diseases of the brain," and daily experience shows this to be a fact. Granted. Cannot the disease be *transferred* from the organ of hearing to some other less important part, and there maintained to an indefinite period without the danger of producing any evil consequences? Certainly it can; and if not *cured* in the sense meant by the above aphorism, yet its seat of action may be changed, and ultimately, by judicious attention to the case, allowed to heal up entirely, as is the practice in almost any other instance, where for a time an issue or purulent discharge is desirable. There is nothing peculiar in the structure of the ear, that

gives it any superiority as a seat of inflammatory action, to lieve other parts in a diseased or tending to a diseased conditi So far from this being the case, we are of the opinion that skilful physician is not justified in allowing this discharge to c tinue a *single day* in *any* case, where he, by slight irritat behind the ear, or the back of the neck, or other parts, is enab to arrest it, but on the contrary he should be as anxious to s it as he is to arrest a purulent ophthalmia or other inflammat affection of the eyes.

We cannot agree with Dr. Bonnafont, as quoted in No. 5 "Ranking's Abstract," that "chronic mucous discharges fi the ear are always owing to ulceration of the parietes of external auditory canal, or of the membrane of the tympanu For it is well known that polypous and other growths prod the same discharges, and great care should be taken in the amination of the auditory canal, with the speculum in a *sun lig* lest these productions escape our notice. They should, in fact always *suspected* to exist in cases of chronic otorrhea. T "these discharges, generally very easily treated in their ac stage, frequently become very obstinate, and terminate in orders which almost always involve a more or less serious deg of deafness, and sometimes the death of the individual," facts which should influence the profession, we are fully c vinced.

We have found, in reference to the treatment, that in the ea stages, in uncomplicated cases, the production of moderate irr tion behind the ear—with careful syringing, first with tepid wa to wash out the secretions, followed by a solution of the plu acetat. in the proportion of from two to six grains to the ounc distilled water—all that was necessary. A small half-moon blis or a drop or two of croton oil, or the latter used in the form unguent, are means usually resorted to, to establish this irritat When complicated, however, with general or local disease, act as concomitant, and sometimes, as the cause of the otorrhea, treatment must necessarily be varied to suit the case. Scrof particularly in children, is a very common condition connec with the disease, and requires the usual constitutional treatm in addition to the local applications. General debility, gas irritation, papular eruptions, spreading erysipelatous and ot cutaneous diseases, induce otorrhœas, and should be treated cordingly. Cases of simple acute otorrhœa, induced by col any of the common causes, are treated so successfully by above, or similar means, that the publication of cases wo scarcely be deemed advisable. Of the chronic forms, howe which are considered more difficult to cure, and many of wh are absolutely incurable, the following cases may be fo instructive.

Miss B., aged fourteen years, light complexion, rather full habit, has had a discharge from both ears for about a year; hearing distance with a watch in left ear, one foot; in the right the watch could be heard indistinctly when placed in contact with the ear. The treatment consisted in washing out the canal well, with tepid water, and then throwing in the aqueous solution of the acetate of lead; four grains to the ounce; and the application of blisters behind the ears. The hearing began to improve immediately, so that at the end of a week the discharge from the left ear had ceased, and the hearing distance increased to six feet. The hearing distance in the right ear was restored to four inches, the discharge continuing. At the end of four weeks the improvement in the right ear became stationary, at ten inches hearing distance; the discharges though small, remained.

On close inspection it was found that a moderate sized polypous growth had been overlooked, on account of the tumefaction in the first examination, in the lower part of the middle third of the auditory passage. This was carefully excised, and the blister-surface restored behind the ear,—with the use of the aqua plumbi. In four days the discharge had nearly ceased; the hearing distance advanced to two feet; and in ten days the discharge of both ears no longer existed; the hearing distance was respectively six and ten feet.

Second case, August 1846.—Mr. B., an artist, dark complexion, aged thirty-four years, has had a discharge from both ears ever since he was two years old. The hearing distance, as indicated by my watch was, in the left ear two inches, in the right ear four inches.

On examination with the speculum, the membrane of the tympanum of *the left ear* was entirely destroyed, together with the bones of the middle ear. When air was driven by the patient through the Eustachian tube, the fluids were *seen* to bubble and heard to rattle in the ear.

The discharge from this ear was not great, and chiefly of a thin watery character.

The membrane of the tympanum of the right ear was destroyed to about two-thirds of its extent, and the bones of the ear were exposed; the handle of the malleus projected into the portion of the membrane which remained, which was also thickened and ulcerated, discharging with the surrounding surface a large quantity of fœtid purulent fluid. The Eustachian tube was here also pervious, as shown by the air-press and catheter, and by voluntary sufflation.

Half moon blisters were applied behind the ears, and an ear lotion of four grains of the acetate of lead, to an ounce of water

was directed, to be applied after carefully syringing the ears with clean tepid water three times a day.

This treatment was continued with the use of a mild astring gargle, (the throat being slightly inflamed) for three days, w my patient left the city for his residence, some eighty miles tant, in New Jersey, to return at the end of a week or ten d

On the 31st of August he again called upon me, and I fo the blistered surface healed. The discharge from the left ear ceased, and the internal surface was dry and shining. The hea distance had increased to four inches.

The discharge from the right ear had diminished, but the cess of destruction was evidently still going on. The hearing tance had however improved to about five inches. The blis were re-applied with directions to add a small quantity of ceratum cantharidum to the ordinary dressings, in order to kee the irritation and discharge. The strength of the lotion wa creased to six grains of the acetate of lead to the ounce, and fluid extract of sarsaparilla, as prepared by Maris & Co., of city, was directed to be taken in teaspoonful doses twice a The gargle to be continued—exercise in moderation to be ta and to avoid coffee, and most of the unnecessary stimula

On the 2d of September he left for his home, the hearing tance having increased to six inches in the left, and seven in in the right ear. The discharge from the right ear al nothing.

Sept. 17th. The hearing continues in the improved condit the discharge from right ear still to a small extent. The sulp of copper in solution was directed as a lotion. The etherial pour was introduced a few times through the Eustachian tu with some small improvement in the sensibility of the nerv audition. The ears were directed to be kept warm, and tected from dust and changes of temperature, by the use of in the auditory canal.

On the 19th patient left the city for his home, with the h ing improved in the right ear to ten inches, the discharge ha *entirely ceased;* and in his left, to something more. One nearly has passed away and the improvement continues.

Other cases might be taken from our case-book, but we did design to make a long article; "sapienti verbum sat."

Practical Observations on Ship Fever as it prevailed in Ph delphia and its environs, in the months of June, July, August, 1847. By LAURENCE TURNBULL, M. D.

This disease prevails at the present time to some extent a epidemic in our city and suburbs. During the last three mo there have been over three hundred cases admitted into

almshouse, and a corresponding number under the care of physicians resident in the city. Having had a number of cases in charge, I have taken this method of making known my views of its nature and treatment, hoping my endeavors may add something to the general stock of knowledge concerning it.

The first great cause of this fever may be traced to the starving state of the population of Ireland; with the subsequent crowded condition of our immigrant ships, without a proper attention to cleanliness and ventilation on the part of their commanders; thus causing the generation of an animal effluvium, which, contaminating the surrounding atmosphere, is received into the lungs, thence proceeding into the circulation. The extreme series of organic capillaries being thus irritated, occasions a subversion of the existing mode of action, through which the different secretions and functions are diminished, increased, or modified.

This disease attacks all ages, from the infant to the old man, and not the poor immigrant only, but the residents of our city, passing by means of this contagious effluvium into the lungs of all constantly exposed to its baneful influence. There cannot be a doubt concerning its contagious nature, as nine of the most severe cases out of twenty-one, in my own practice, were those residing in the same houses with the sick, none of them having been on board ship, but citizens for some time.

The period which elapses before the disease shows itself averages from one to two weeks, but in most cases it makes its appearance in a few days after leaving the vessel.

Nearly every ship which enters our port brings a greater or less number of invalids, some having suffered for twenty-six and twenty-eight days, without proper nourishment or medical attendance. In many instances, the number of passengers in the Liverpool packets to New York, has exceeded five hundred, and the regulations of those ships obliged them to leave their berths between the hours of three and four, A. M., for the purpose of cleansing them, so much water being used in this process as to leave them in a damp and unhealthy condition for many hours. The water for culinary purposes was not distributed until nine, so that the strong and active alone procured a meal before twelve or one, P. M. To insure personal cleanliness for those who were not so disposed, a barrel of water was provided and a portion of it poured over the poor creatures, who were not even fortified by proper food. It cannot therefore be a matter of astonishment that a number should be sick on the voyage, and a still larger number fit only for the hospital on their arrival, having had within the vessel all the elements to generate typhus fever. First, their crowded condition; secondly, their want of proper rest; thirdly, the want of proper nourishment; and

fourthly, the damp condition of their sleeping and eating ap
ments.

The authorities now remove the sick either into the Lazarett
the fever hospital at Bush Hill, which was opened for the recep
of patients on the ninth of July, under the charge of Drs. L.
Knight and William Ashley; one hundred and eighty cases ha
been admitted from that time up to the eighteenth of August.
that number thirteen have died, thirty have been discharged cu
and one hundred and thirty-seven remain under treatment.

Of the thirteen cases which terminated fatally, three were i
dying state when admitted, and three died of purpura hæmorrhag
marasmus and phthisis pulmonalis, thus considerably reducing
number of deaths by fever, and showing that the mortality is sma
comparison with the accounts received from Canada and I
York.

The situation of the hospital is very favourable, being light,
and well ventilated. The only objection is the want of sp
obliging them to crowd the wards, so that dysentery or diarr
occurring as a complication, it is apt to assume a malignant for

The premonitory symptoms are as follows: Slight chill,
hot and dry, nausea, and in some cases vomiting, muscular pai
the back and limbs, with intense pain in the frontal region
creasing from the first to the sixth day. Tongue of a wh
color over the surface, tip of bright red; pulse averaging from eig
six to one hundred and twenty, with bowels costive.

These symptoms continue for several days, when the skin
comes of a dusky red, the eyes are injected, tongue covered wi
thick yellowish, brown, or black paste; teeth covered with sor
acute pain over the epigastric region, with skin covered with a
techial eruption coming out from the sixth to the tenth day.
lirium now supervenes, with congestion of the lungs, brain or b
chial tubes, generally accompanied by deafness, with spasm
twitchings of the muscles, and in some cases dysentery and pro
sweats, not of a critical nature.

These symptoms either increase or diminish towards the thirte
or fourteenth day, or may terminate in death from the twentiet
the thirtieth day, the liability to relapse being very great i
cases.

I have found the following symptoms favorable when occur
about the fourteenth or twenty-first day: tongue becoming m
first at edges; slight salivation; pulse fuller and slower, with to
not tremulous when protruded. Unfavorable symptoms: g
muscular debility; decubitus, or gliding down to the bottom of
bed, picking at the clothes, or catching at imaginary objects.

Treatment.—In the first stage a gentle aperient of oleum ri
or mild neutral salt. Second stage; to diminish the fever by fr

sponging the body with tepid water, with the free use of ice or neutral mixture. Thirdly; to subdue local inflammation by cups or leeches, and by applying cold by means of ice to the head, or blister to the nape of the neck, with small doses of hydrargyrum cum cretâ and pulvis rhei. Lastly; to give quiniæ sulphas in pills of one grain three times a day, with from f℥iv. to f℥vi. of port wine.

By following the above course of treatment, bearing in mind ventilation and cleanliness, with a simple farinaceous diet, out of twenty-one cases I have lost but two, and regretted much that in both instances there was no opportunity for a post mortem examination.

395 *Spruce street, Philadelphia.*

BIBLIOGRAPHICAL NOTICES.

The South-Western Medical Advocate. Edited by James Conquest Cross, M. D., Professor of the Institutes of Medicine and Medical Jurisprudence in the Memphis Medical College, assisted by his colleagues. No. 1. Vol. 1, for July 1847. Memphis, Tennessee.

It has ever been our wont to herald every new labourer in the arduous, responsible, and, too often unrequited and thankless field of medical journalism; and with sincerity have we welcomed them when ushered into existence under the banner of chivalry and honour, even although they may have attached themselves to some particular school or clique, whose interests they professedly watched over. The number of the Journal—if so it may be called—before us, by its very title indicates that it is not free from such bias; nor do we object to it on this account. To be the organ of the profession in the south-western portion of this extensive country would be an enviable position for the editor; but we feel assured, that if the forthcoming numbers are to be judged of by the present, the high-minded and liberal practitioners of that region will eschew it, and deny that the unqualified and reckless assertions contained in it are participated in by any one of them. The advocacy of south-western medicine is, however, but an infinitesimal portion of its objects. The grand *desideratum* is "to establish a medium of communication be-

tween the *Memphis Medical College,*" [an institution establi
immediately after the editor left the Transylvania school]—"
the *Medical Public* of the south-west;" and a secondary—per
primary—object would seem to be, to enable the editor to
against all who have in any manner interfered with his de
course, and especially against his former colleagues of the
versity of Transylvania, who, some time ago, published, u
their own signatures, statements, which it would be difficult t
lieve were without foundation, and from which, unquestion
it has not been an easy matter for the editor to exonerate
self. Of this controversy, notwithstanding the number of
sives that have reached us, we have hitherto expressed no opi
For the sake of the individual most deeply concerned, as we
of that of the profession to which he belongs, and of the res
able school of which all the controversialists had formed
we were silent: and we had hoped, that some discretion w
have been exercised, and that if it had been deemed proper
such a discourse as the one that *fills* the first number o
"*South-Western Medical Advocate*" should be *delivered*, it
assuredly would never be *published*,—even although requ
by a Board of Trustees, and by a medical—always indulge
class.

The number before us is truly a "psychological phenomen
It is *wholly* occupied with "*An inaugural discourse on
policy of establishing a school of medicine in the city of M
phis, Tennessee.*" It is essentially the editor and the Mem
Medical School—*Ego et rex meus!*—A goodly portion trea
the editor; another portion of the Memphis Medical Sch
whilst no little space is devoted to the threadbare argumen
"sectional medicine," and to show, that a south-western phys
must be educated in the south-west,—of course at Mem
upon the same principle, we presume, as the old Joe Miller b
that if a man be born in a stable he must necessarily be a hor
that northern schools are inadequate to teach southern stud
—that northern pathology and therapeutics are not sout
pathology and therapeutics;—and farther, that the respec
gentlemen who fill so well the different chairs in Louisville,
in Lexington,—where the editor himself taught so lately, an
which he was so long the energetic advocate,—are wholly

to teach those who are destined to be south-western practitioners. What will the veteran professor of the former school—who has been so long the ardent advocate of "sectional medicine,"—as it has been termed—say to this? when he finds his own arguments returned to him, and that he and his colleagues are deemed as unfit to prepare students for the south and southwest, as we of the north are?

But all these views, and the establishment of the Memphis Medical school itself, are—it would seem—the suggestions of the purest philanthropy, untainted by the slightest selfish motive!

"Is another school of medicine necessary? This we have alleged; but an unsupported and independent assertion upon so important a subject, would be justly treated with ridicule and contempt, and unless we shall be able to appeal to satisfactory reasons, flowing from public necessity, there will be ground to suspect, if not to believe, that the individual who now addresses you, as well as those with whom he is associated, have been induced to embark in the enterprise from exclusively selfish considerations. Than this, we are sure, no more unjust or injurious imputation could be cast, at least upon our colleagues." [A wise reservation!] "We hope, therefore, to receive a patient, if not an indulgent hearing, while an attempt is made to recount to you some of the leading considerations that have caused the present enterprise to be undertaken." p. 3.

One of these "leading considerations," to which the editor repeatedly refers, is, that "in the schools of the north, as well as in those of Kentucky and Ohio, not a single teacher is to be found, who, from personal observation and experience, is qualified to impart a correct knowledge of the nature and treatment of the diseases that prevail in the South. This fact, which is utterly incontestable, has failed to attract the attention to which it is entitled, and although there may be those disposed to overlook or underprize it, in my humble judgment, it is of very great if not paramount importance." p. 5.

And are these the views the editor has always maintained? We suspect not;—for we have a faint recollection of his having visited the northern cities, some years ago, for the purpose of procuring a Professor of the Principles and *Practice* of Medicine, for the medical department of the University of Transylvania, when he most strenuously but unsuccessfully exerted himself there

for that purpose. He may reply, indeed, as did another pr
sor of the west, on a different occasion, that he was then ac
for his colleagues, not for himself. The professor alluded to
been a zealous teacher in a town of not more than eight t
sand inhabitants, which *then* he thought, or maintained, posse
the necessary facilities for anatomical and clinical instruc
On being translated, however, to a town of thirty thousan
habitants—*cælum et animum mutat*—he now finds that
former position was totally devoid of the requisite facilities;
loudly proclaims the superior advantages, in these respect
his new position. On being asked how he reconciled his
and his *present* views: he replied, that in the former case
was but expressing the views of his colleagues, in the latte
own!

The editor may say, that his agency for the Transylv
school, and the arguments which he adduced in its favour, w
but the delegated views of others; but he certainly succeede
impressing those with whom he came in contact, that they w
as strongly his own.

But when did he first learn, that the schools of Kentucky
Ohio are liable to these same objections that have been imag
to apply to the northern? Only, we apprehend, since he qui
so summarily the one to which he was attached, and to wh
he alludes so bitterly in many parts of his "Discourse." He
fers, indeed, no opportunity to pass by for vilifying it, or som
its able teachers. Thus, when referring, in a note, to Dr. C
die's opinion, that the immense doses of sulphate of quinia gi
by many of the southern physicians are "certainly exces
and uncalled for," he exclaims:

"How does he [Dr. Condie] know? Has he ever seen a c
of congestive remittent fever in the South? No. Then
knows nothing about it, and has no right to question the s
and judgment of those who are familiar with the subject. T
is like the philippic which Dr. Dudley is in the annual habi
pronouncing against quinine and iodine; and yet he has the
surance to tell his classes he never employed them in his li
p. 6.

And again:

"The diseases of the northern part of Kentucky, and of

whole of Ohio, differ in several striking respects, from those that are observed in lower latitudes: those, therefore, who undertake to teach medicine in either Louisville, Cincinnati, or Lexington, without having previously acquired a personal knowledge of those of the latter, will never, so long as they remain in those cities, become competent teachers of those who intend practising the profession in the South.

And again:

"But the alumni of the Atlantic schools, as well as those of Kentucky and Ohio, regardless of the great fundamental facts that the pathological phenomena and therapeutical indications of the maladies of the South differ widely from those that are observed in such as occur independently of intense heat and a malarious atmosphere, and believing they have been taught correctly, without hesitation or remorse, subject the southern constitution to rules of treatment that are no less absurd in principle, than they are frightfully fatal in practice. We feel authorized in asserting, as the result of the multiplied experience and observation of all ages in low latitudes, that the liver is the great emporium of both health and disease in hot climates. In all its pathological and therapeutical relations it is an organ of paramount importance to the practitioner, for it is, as we have said, directly or indirectly concerned in most of the modes of morbid action which prevail in the South. A thorough acquaintance with the physiology, pathology, and therapeutics of the great organ, so far as understood, is therefore entirely indispensable to the successful treatment of Southern maladies."

And he observes subsequently and characteristically:

"The liver, whatever may be said by those, who, in reality, know nothing on the subject, but who, from motives perfectly intelligible, may be disposed to set aside or obscure the perception of the truth, is as much of a pathological autocrat in the South, as the lungs are in Philadelphia or Boston—in Louisville, Cincinnati or Lexington; and the other organs of the body are as completely under the presidency of the former in the South, as they are under that of the latter at the North."

All this, however, is mere twaddle, conveyed, it is true, in a sort of professional language, but not the less twaddle. It is the view which led calomel to be considered in the West, South, and South-west as the "Samson article of the Materia Medica," a Samson whose strength, however, is now gone from it; and this result brought about, we believe, in part, by the teaching of certain northern professors; but assuredly it is not the

view under which the sulphate of quinia is now regarded a
southern "Samson!" And can we, in charity, believe, tha
Editor has forgotten that one of the most powerful advocate
the *febrifuge* virtues of this valuable agent is Professor Mit
of Lexington,—a teacher in one of the very schools, which
cording to him, "are, no matter what ingenious sophistry ma
employed to prove the contrary, necessarily disqualified to im
such information as will prepare their Alumni to encounter
success the mortal endemics that annually desolate those
gions."

And, then, to prove, that of "the practice so common and fi
established in the South-west of arresting, or jugulating, a
French term it, remittent fever," the teachers and writers o
Atlantic States and of the West are "entirely ignorant,"
Editor quotes an article by Dr. Ford of Georgia, published i
Georgia Medical Journal, in which that gentleman refers to
ferent "Practices of Physic" published in the United States;
to do their authors justice—one of them at least—it would h
been but proper to refer to the latest edition, and to a pa
which the quinia treatment *is* referred to. It is too much, h
ever, to expect that authors—even so *distinguished* as he o
"Chronothermal System," whom we find the Editor citin
authority in more than one part of his "discourse"—can
up with sudden *pirouettes* in practice, and a more signal one
tainly never occurred than in the transition from the calome
the quinia management of southern fevers. Some of the w
cited were published years ago, and when the plans of treat
were by no means as developed and as general as they a
present.

And, what a gross and unfounded libel we have in the
lowing assertion!

"The statistical results of Dance's experience, or rather ex
ments, as embodied in his *Treatise on Fevers*, are a melanc
comment on the curative efficacy of French medicine, of w
North-eastern practice is almost a literal transcript, for medical
pectation, which Asclepiades properly called a meditation
death, constitutes the sum and substance of the former, is the c
mon and current practice of the latter. p. 21.

It appears, however, that epidemics differ as much as

tional" diseases; and therefore, we presume, we must have a special school for each epidemic!

"No physician has ever witnessed two epidemics of precisely the same character, that would yield to precisely the same treatment, or that would submit to the management followed with success in sporadic cases. There is a tendency to death in a particular way in each epidemic, and this the physician must discover, and if possible resist." p. 23.

And as if to "outherod Herod," we have the following assertion to which we shall not attach an epithet that any one at all acquainted with facts could readily supply.

"The inability of northern physicians, as well as those who reside in temperate latitudes, to treat successfully the maladies of the south-west, is conclusively proved by the enormous comparative mortality which is observed amongst those who, after having resided for months, in succession, in a malarious region, migrate to cold latitudes and subsequently sicken. From what we have actually observed" [in all the northern or middle states of the Union, we presume!] "we do not hesitate to affirm that it is almost equivalent to a sentence of death for south-western men to sicken of any acute disease, and especially of fever, in any of the northern or middle states of this Union."

Quis credat? Non ego! Yet the editor says it is so: "and sure he is an honorable man"!

Again:

"It has been alleged in this discourse that a great degree of scepticism in relation to the curative powers of therapeutical agents prevails amongst the dignitaries of the profession at the north, and we may say from personal intercourse with medical men of the highest respectability, and without injustice to them, that it exists to almost an equal extent in the larger cities of the west. Nothing of this sort is observed at the south-west."

All which is, of course, intended to show the superiority in *practical* knowledge of the south-western physicians.

The Editor now no longer pipes: he actually "bursts the bag"!

"In the south-west, neither the homœopathist nor the anatomo-pathologist will find countenance or encouragement. Disease is much too violent and malignant, and the efficacy of active and energetic treatment has been too often witnessed, is too well understood, and is too justly appreciated for either of them to be able to take root or to flourish. This is impossible, unless the homœopathist practises secretly what he has not courage or

honesty enough openly to avow, and this it is believed he d
in all latitudes; or the anatomo-pathologist abandons the an
mical basis of treatment, and endeavours to relieve human su
ing by studying and analyzing symptoms, and observing
effects of remedial agents. Since, therefore, the public in
north-eastern portions of the United States has been reduce
the desperate necessity of selecting between homœopathy
medical expectation, and as, from a full trial of both, it has b
constrained to decide in favour of the former, it must appea
every intelligent and reflecting individual, at all acquainted v
the complaints that result from malaria or intense he
[neither of which is known, of course, in the north!] "the m
preposterous of all absurd ideas, to send young men to the no
east or west, in order to prepare them for the practical dutie
the profession in the south-west." p. 36.

We have before adverted to the fact, that the editor was a str
ous advocate, at one time, for the appointment of a north-eas
teacher to the chair of *Practice* of Medicine in the Transylv
Medical School. It now appears that such professors, an
western professors, are not only absolutely unfit, but must
ever remain unfit for any such office in the south-western sch
Speaking more especially of Louisville, Cincinnati, and Lex
ton, he says:—

"In neither of them can a teacher be found by whom
pathological and therapeutical principles, on which the treatm
of south-western maladies is regulated, are taught. This ev
sensible man must regard as a great defect in the organiza
of the faculties of these institutions, for at least one-half t
alumni are destined to find homes and to seek their fortune
the lower latitudes of the Union. Nor is this all, or the m
mortifying or discouraging part of the truth on this subj
Whenever an occasion has arisen which put it in their powe
reflect honor and distinction by promotion to the dignity o
professorship, they have almost invariably preferred no
eastern men, who know nothing of western, and especially
south-western maladies. That such persons are unfit for
functions they are expected to perform, we have already sho
that they will always remain so we assert from personal obse
tion, as we know it to be impossible to divorce the confir
and committed anatomo-pathologist from his 'great patholog
and therapeutical principles.'" p. 37.

And moreover:

"The reasons why they" [south-western physicians] "have
been permitted to take a more distinguished part in the teach

of medicine in the United States, are obvious and intelligible. They observe and reflect more but write less than the physicians of the large cities of this Union; because what they do write" [the editor for example!] "is for the instruction of the profession, and not to sustain some 'great pathological principle of universal application;' because they aim to become practically useful as practitioners, and, if need be, teachers, and not to win conspicuous stations by becoming voluminous compilers of the results of other men's experience; because they have less book but more clinical knowledge; and finally, because the trade of criticism is exercised by north-eastern men almost exclusively. The result is, north-eastern books and north-eastern men are praised with little reference to their intrinsic merits, while south-western books and south-western men are overlooked and neglected or condemned." (?) p. 38.

In no way can this altogether supposititious evil—a creation of the author's own prolific brain—fearfully prolific in such conceits—be successfully rectified, he thinks, except "through their own schools and journals of medicine—through the instrumentality of which the ablest of themselves" [iterum ego!] "are the teachers, and in publications for which the most industrious, observing and talented of them are the writers." p. 39.

But the profession of the south-west require no such absurd vindication. We can affirm, most positively, that the kindest and most liberal sentiments are entertained towards them in this portion of the Union: it would be ridiculous to suppose that it could be otherwise; but if any thing were calculated to break in upon this most desirable harmony of feeling, it would be such loose, gratuitous, and indiscreet statements as those we have just quoted. We do not believe that they will have such an unfortunate effect upon a solitary 'north-eastern' individual, but we will not say what estimate they may cause to be put upon the head and heart of him from whom they emanated. In our opinion they certainly are not creditable to either the one or the other. It is idle, too, for the editor to refer to the difference which he fancies to exist between the physicians of the north-eastern cities, and those of the south-west, in the former writing more, but thinking less than the latter. He himself is, perhaps, the most voluminous medical pamphleteer that the whole Union could furnish; and as for the amount of thought—well directed

and useful thought—contained in his pamphlets, all we shall
is, that the extracts we have given are amongst the *most fa*
able specimens of his various polemical sheets, and fragm
of sheets, which have been inflicted upon us. Of the g
illiberality that pervades the "Discourse," almost every p
furnishes one or more examples, and where the object is to
illiberal feeling, the language certainly savours, at times,
strongly of hyperbole. Thus, in speaking of the school, c
highest in his favour—the one at Lexington—the south-wes
neophyte of one year's standing remarks:

"Lexington, which does not contain over eight thousand
habitants, had for many the second, and for some years the t
medical institution in the United States, although, at pres
from causes to which it is now useless to advert, it has sunk
low as to be, we believe, the tenth or twelfth of the Union.

Where is the authority for this? *We* know of none.

It will be observed, that we have entered into no vindica
of the north-eastern schools against the attacks made upon th
by the editor of the *South-western Medical Advocate*. It wo
be idle to answer that which requires no answer, and the ob
of which must be apparent to the most careless reader. We h
been desirous only of shewing up the Journal and the Editor
his own shewing; to announce, in sporting language, "
name of the horse and the colour of the rider;" and the re
must have been a desire on the part of every friend of the w
profession, and especially of south-western medicine, that
South-western medical *Detractor*, rather than South-wes
medical *Advocate*, should quit the course—that it should c
where it has begun, and that the prolific author should follow
example set him by Cid Hamet Benengeli, in the last chapte
Don Quixotte, and promise repose to his pen. Especially w
we advise him—although we are satisfied that the office of a
ser is, at best, but a thankless one, and that the advice wil
wholly thrown away—to be a shining specimen, not of
Acarus Crossii, which has so much puzzled the naturalist,
whose precise position it has been so difficult to define, bu
the south-western genus of physicians, as he describes th
"who observe and reflect more, but write less than the p

sicians of the large cities of this Union, because what they write is for the instruction of the profession." Let him but succeed in this, and we shall be the first to herald and applaud the happy change.

A Treatise on the Practice of Medicine. By GEORGE B. WOOD, M. D., Professor of Materia Medica and Pharmacy in the University of Pennsylvania; one of the Physicians to the Pennsylvania Hospital; one of the Authors of the Dispensatory of the United States of America, etc., etc. 2 vols. 8vo. Grigg, Elliott & Co. Philadelphia, 1847.

Formerly, the appearance of a general Treatise on the Practice of Medicine was the event of an age; of late years, it is scarcely less than an annual occurrence. So numerous are they on our shelves, and some of them so complete, that one is at a loss to conceive of the occasion for a new one. Until lapse of time and the advancement of our science have added new facts, or shed more light upon what is already known, it would seem difficult for a writer to find materials out of which to construct such a work, without injustice to his readers, and to those from whom he derives whatever is valuable in his production.

Dr. Wood experienced the truth of these observations, and accordingly, in his preface we find the following apology.

"In adding another to the many valuable Treatises on the Practice of Medicine, the author may be reasonably expected to show, upon what grounds he has ventured to advance a new claim to the public attention, already so fully occupied. He has no other excuse to offer than this; that he has written in obedience to impulses which he could not well resist. Having been engaged, for nearly thirty years, in public and private practice, and, during that time, devoted an almost exclusive attention to the study of diseases and their remedies, he has accumulated facts, and formed opinions, which have been long soliciting expression, with an urgency to which he has at length yielded, though unfeignedly distrustful of their sufficient value."

What are the facts which have been accumulated, and whether derived from authors who have preceded him, or exclusively of his own discovering, and in relation to what subjects, is not stated in the preface, and consequently it is only after tracing them out by searching through the work, that we are enabled to ap-

preciate them. From the connection in which the subject is sented, we infer that the facts alluded to are original with author, although not so clearly stated, and if so, it is to be gretted, considering how few are the discoveries of this l which it is the fortune of a single observer to bring to li that time and further investigations confirm,—it is to be regret we say, that these, which ought to be the gems of the w were not more specifically pointed out: it would at least h saved the reader the task of wading through two ponderous umes to find them. The "Opinions" which the author, in course of "nearly thirty years, in public and private practice," formed, are neither so sparse nor so difficult to discover, after all, constitute the most interesting as well as original of the work. Without dogmatism of expression, they are put forth on most occasions in a way that leaves little roon suppose that any doubts are felt of their correctness. Wher ference is made to the opinions of others, it is in a courteous sp and rarely for the purpose of criticism. On other occasions, sent and commendation are equally withheld.

Dr. Wood has divided his treatise into *two Parts*, each ded again into *sections*, *sub-sections*, and *articles*.

Part I. is devoted to General Pathology and Therapeutics, consists of four chapters; which treat respectively of the " stituent forms of disease, as disease of the fluids and diseas the solids; causes of disease, or etiology; symptomatology semeiology; course, duration, and termination of disease; d nosis; prognosis; general therapeutics, embracing *general i cations* and general *therapeutic processes*.

Part II. treats of special pathology and therapeutics, and i vided into *three classes*, under which are arranged *general eases*, *constitutional diseases* and *local diseases*. Under the h of *general diseases* we have fevers—including plague, vari vaccina, varicella, rubeola, scarlatina, and erysipelas; the of *constitutional diseases* includes only *rheumatism* and g whilst that of *local diseases*, amongst a vast catalogue, embr *insanity* and *delirium tremens*—*epilepsy* and *chorea*, *hy phobia*, *hysteria*, etc.

In the yet unsettled state of pathology, all classification of eases must be imperfect, and consequently arbitrary, bu

seems to us that this one does not represent the present state of our knowledge. Take, for example, the two last named diseases, and apply the author's own definition of the terms, and see how far they answer to the character of local diseases. "Hydrophobia is a peculiar disease, resulting from the entrance into the system of the poison of a rabid animal." It is not alledged that the local phenomena that are described, "such as aching, tingling, burning, coldness, numbness, or stiffness in the cicatrix" constitute the disease, any more than the pustule which follows the insertion of the virus of small pox or vaccine into the arm. In the former as in the latter instances, the disease is referred to "*the entrance into the system of the poison,*" and why in the one case it should be regarded as a *local* and in the other as a *constitutional* disease, it is difficult to conceive. Again: "Hysteria is a disease consisting in a morbid excitability of *the general nervous system,* [the italics are our own,] showing itself in occasional convulsive paroxysms, and diversified functional disorder." As already remarked, all classifications of diseases are necessarily to some extent arbitrary; an author may therefore devise or adopt that which may best accord with his own views, but it is not to be expected that he shall contradict himself—that the phenomena which constitute the disease, according to his own description, shall be *general,* whilst it is included in the catalogue of such as are regarded as *local.* It is not our purpose, however, to enter upon an extended criticism of the work, but, having mentioned its general contents, make such occasional comments as the nature of the subjects may suggest, and our restricted limits permit. In our "devious course" we shall doubtless find much to commend, and, perchance, something from which to dissent.

In his observations on general pathology, under the head of *Depression,* we find the following remarks, which are a fair specimen of the author's style and mode of reasoning:

"There are three conditions in which the system is below the ordinary standard of health, and which, though if slight and of brief duration, they would scarcely be accounted morbid, are decidedly so when considerable or protracted. These three conditions are often confounded under the name of debility, or asthenia, but are essentially distinct, and sometimes require different if not

opposite modes of treatment. It is, therefore, important to h clear conceptions of their nature, and to be able practically to tinguish them. The conditions alluded to are depression, debil and diminished excitability. It must be borne in mind that acti the power to act, and the susceptibility to the influence of citant agents, which is here denominated excitability, are differ conditions or qualities of the system, and may each be redu without a necessary reduction of the others. A morbid dimi tion of action is *depression*, a similar diminution of power is *bility*, and the term *diminished excitability* explains itself."

"These conditions," the author remarks, "may and of do co-exist;" but he thinks they are essentially distinct, and n exist separately. This position he explains as follows:

"That power may be diminished, without a diminution excitability or of action, is no less true. It is notorious, tha debilitated system is often thrown into tumultuous disorder causes which would produce no such effect in health. Thus an individual much reduced by an impoverished diet, or by pletion, how often do we observe a panting respiration, and almost convulsive action of the heart, under a degree of bod exertion which would have scarcely discomposed these fu tions, in the ordinary state of the system! How often, un similar circumstances, do the slightest causes produce great n vous disturbance, amounting in the female to violent hyster These results can be accounted for only by admitting an increa excitability, which enables the same amount of excitant influe to produce a greater amount of effect."

Dr. Wood may be regarded as a strenuous advocate of modern doctrine of humoral pathology. He considers it "cert that, in some diseases, as in malignant fevers, for example, blood does undergo great deterioration, either from the dir action of the poison introduced, or from derangement of the gans, and thus becomes wholly unfit to support the healthy tions, which are consequently greatly depressed."

We are glad to find the following sound views expressed o subject too much misunderstood by many physicians, who se to think that excitement is always to be overcome by means t reduce the strength of the system, and especially by blood-letti

"But it must be borne in mind, that a mere loss of blood, o mere diminution of its stimulant properties, without any positi noxious deteioration, though it may cause debility, does not n cessarily diminish excitability. On the contrary, the organs f more acutely the impression of other excitants, and are stimulat

into excessive action by causes which would not have this effect in health. I have before alluded to the tumultuous disorder produced under these circumstances, in the respiratory and circulatory systems, by moderate muscular exertion, and in the nervous system by slight causes of disturbance. Even without any apparent excitement, the heart very often acts with greatly increased frequency. This phenomenon, however, is susceptible of explanation. The nutrition, muscular contraction, digestion, and other functions constantly going on in the system, require a certain amount of blood for their support; and in order to insure the requisite supply, nature has established such a sympathy between the parts in which these functions are performed, and the heart, as to call the latter organ into increased action, when any deficiency is experienced." (page 62.)

Whatever may be thought of the explanation, the practical deduction is of very great importance in the treatment of disease. In an enfeebled condition of the system, to bleed, purge and starve, because the heart acts tumultuously, is literally to slay the patient; and yet, regardless of all the other indications, we have known extensive bleeding performed only a few hours before death, *because the heart was beating with unwonted force!* In such cases, it will always be found that instead of being curbed, the *frequency*, at least, of the heart's contractions will be increased, and the danger vastly augmented.

The author treats of *revulsion*, *derivation*, and *counter-irritation*, as one and the same thing—as if, in fact, these were convertible terms. Thus he remarks: "This [revulsion—derivation—counter-irritation] consists in the diversion of disease from one part of the system, by the production of inflammation, or irritation, in another part." (p. 216.) This is true of counter-irritation, but very effectual revulsion is often made by means which excite neither irritation nor inflammation. The various hygienic influences so successfully invoked in the treatment of many chronic diseases act by the production of healthy excitement of the various organs of the body, without that excitement rising to the degree of irritation.

After explaining the action of revulsive agents (or rather of counter-irritants) the reader is very properly cautioned against their employment in the active stage of inflammatory diseases.

"But," observes the author, "during the existence of high constitutional excitement, the revulsive agent is not able to unseat

the inflammation, and, if of itself irritant, as in the instance rubefacients and blisters, may add to the existing excitement, the sympathy of the system with the superficial inflammat they produce. But, when the revulsive impression is conjoi with copious depletion, as in the case of hydragogue cathart which produce a revulsion towards the whole lining membr of the bowels, while they evacuate the contents of the blood sels, it may be resorted to even in the greatest height of the flammation. The copious secretion prevents the excitemen an irritation in the bowels, sufficient to bring the constitution i sympathy." (p. 217.)

We cannot assent to the correctness of the practice inculca in this paragraph. Although hydragogue cathartics prod "copious depletion," it is only of the watery part of the blo and not its richer and more stimulating portion; and beside, action of several medicines of this class is sufficiently energ to cause so great local excitement as to materially effect the ge ral nervous and vascular systems. We think that Dr. Wood h self, on reflection, would hardly prescribe colocynth, scamm or gamboge in hepatitis, peritonitis, or pneumonia, "in greatest height of the inflammation;" trusting to the copio ness of the secretions to counteract their general excitant fluences.

We have noticed occasional instances like these in which differ from the author in points of practice, and in which we th he differs from *himself*—for in the general soundness of his t rapeutical principles we entirely concur. They are such as have acted on for a third of a century, slightly modified may be, by the progress of our science. It is, however, in ca ing into practice these principles, that we should have oc sion to differ from the author, and on a closer examination of work, it is not unlikely that these occasions would be multipl We perceive, for instance, the greatest confidence reposed in tain articles of the materia medica, to which we attach very lit such as the *citrate of potassa* in fevers of almost every type, especially bilious fevers. The acetic and tartaric acids in com nation with potassa, according to Dr. Wood, will not do—nor citric acid with either of the carbonates of soda. "I feel v confident," he remarks, "that no practitioner who has ever b in the habit of using the effervescing draught, *properly*

pared, (i. e. fresh lemon juice and carbonate of potassa, in the effervescing state) in the treatment of bilious fever, will be disposed to abandon it." We have no doubt that this is true, and that those who are "in the habit of using" any other article will not be disposed to abandon it. "Habit" is a strong law, that few venture to dispute. We acquire the "habit" of giving certain things in particular diseases, and, in self-limited diseases, as fevers often are, our patients generally get well, and of course the medicine, no matter how inert, gets the credit of the cure, and our "habit" is confirmed.

We do not object to the efferverscing draught in bilious fever. It is as simple and innoxious as any thing else, and if something must be done to keep the patient and the doctor quiet, it may as well be given, although we should much prefer a piece of ice or a little cold water: but we object to overweening confidence in any single article in all cases of disease wearing the same general character, and especially to the ascription of very active properties to such as are really inert under almost any circumstances.

Generally speaking, the pathological principles, as well as the therapeutical laws, set forth in this treatise, will be found in accordance with the present advanced state of our knowledge on these subjects. Usually, it is not the author's custom to doubt, even on points regarded by the generality of authors as doubtful. Thus, yellow fever is neither gastritis nor a form of bilious fever, nor miasmatic, but a *peculiar* fever.

"There can, I think, be no doubt, that yellow fever is an entirely peculiar and distinct disease. What are the precise pathological conditions essential to it are unknown. It is highly probable that the blood is prominently in fault, being deranged by the immediate action of the morbific cause."—(p. 308.)

Congestive, or, as the author calls it, *pernicious* fever, is a "form of miasmatic fever," in which the congested condition of the vessels of certain organs is merely a consequence of the disease, and "it is in the peculiar state of the innervation, that we are to look for the source at once of the symptoms and the danger."

Continued or Typhoid fever he denominates "*enteric fever*," and makes it, in its causes, symptoms and character, a distinct disease from *typhus*, thus cutting the knotty question of identity in the most summary manner, although M. M. Louis, Gaultier

de Claubry and others, believe their typhoid and typhus to b
solutely identical: and one of the most recent numbers of
Archives Generale des Mèdicine (for May, 1847,) states
typhoid fever is one of the most irritating questions to the
demy de Medicine, and one on which the opinions of its m
bers are most divided and most in contradiction. Its identity
remittent or bilious fever is also denied, notwithstanding the
thor admits that "cases having all the essential characters o
teric fever occasionally end in intermittent; and bilious fe
or affections which cannot be distinguished from them, so
times show signs of enteric fever during their progress."

The "present work claims to be something more than a
compilation." The author does not, however, pretend tha
facts or opinions advanced are generally original with him
but that "these materials have for the most part been maturely
sidered, have been submitted to the closest scrutiny of whic
was capable, and have been re-arranged in accordance with
own best judgment." This is certainly the true course for a w
to pursue who desires to prepare a comprehensive treatise w
shall do full justice to the subject without undue prolixity.
do justice, however, at the same time, to antecedent and
temporary writers and observers, by awarding to each the c
of what properly belongs to him, when thus "re-arrang
these materials to suit an author's own judgment, is not so
a matter; and we regret to find that in the work before us
effort does not seem to have been always made, where
impressions or personal predilections were not strong enou
incite to the task. We think there are many instances
looked where the writings of American physicians might
been profitably cited, whilst the published opinions of son
the most eminent of the profession, whose names are rarely
all alluded to in the course of the work, would have given
ditional interest to its pages.

We have thus cursorily noticed some of the points on w
we do not entirely accord with the author in the work b
us. Candor would not allow us to do less. We are
sensible of the difficulty there is in speaking of the pro
tions of a writer whom we have known and esteemed thr

many long years of uninterrupted friendship, but we have endeavoured to do so with the impartiality demanded by truth and science, and it is in this spirit that we pronounce the treatise of Dr. Wood, notwithstanding the objections we have made, to be one of the most valuable of the works that have come from the American press, and exceedingly creditable to the zeal and abilities of the accomplished author.

Elements of Chemistry, including the history of the imponderables, and the Inorganic Chemistry of the late Edward Turner, M. D., F. R. S. L. and E., Seventh Edition, and the Outlines of Organic Chemistry, by William Gregory, M. D., &c., Professor of Chemistry, University of Edinburg. With additions, by JAMES B. ROGERS, M. D., Professor of General Chemistry, Franklin Institute, and Lecturer on Medical Chemistry, &c., and ROBERT E. ROGERS, M. D., &c., Professor of Chemistry and Materia Medica, University of Virginia, &c., 8vo. pp. 848. Thomas, Cowperthwaite & Co., Philadelphia, 1846.

Dr. Turner's elements of Chemistry has for many years sustained the highest character, both in Europe and America, as a full and accurate exposition of the principles of the science. It has already passed through several editions in this country, under the careful supervision of Professor Bache, to whom the Author, in the European edition, published shortly before his death, acknowledged himself indebted for the correction of numerous errors and the addition of much useful matter. We are pleased to find that the editors of the present edition have adopted these corrections of Dr. Bache, to whose labours they refer in the following courteous and just language: "In labouring to correct the numerous typographical errors of the London work, the editors have been greatly assisted by the American re-prints of the former edition of Turner's Elements, the great accuracy of which reflects so much credit on the industry and attainments of their accomplished editor."

In noticing a work which has passed through so many editions, neither analysis, criticism, nor commendation, is required or will

be expected. All that seems necessary is to inform the read the changes and additions contained in the edition before These are well set forth in the following extract from preface.

"The present blended republication embraces the whole o Imponderables and Inorganic Chemistry of Dr. Turner's known Elements, together with the Organic Chemistry of fessor Gregory's Outlines, and the separate treatises on Mi and Organic Analysis by Mr. Parnell and Professor Liebig. the first plan of the work it was proposed simply to re-edi seventh edition of Turner's Elements, making such additions emendations as the progress of the science required, and at same time re-moulding the part devoted to Organic Chemistr an abridged and systematic shape. The opportune appear of Professor Gregory's Outlines greatly aided the accomplish of this plan by furnishing ready prepared, just such a conde and methodistical treatise on Organic Chemistry as was origi proposed, and the publishers availing themselves of so valu an aid, at once determined upon substituting the second pa the outlines in place of the intended abridgement of the Org Chemistry of Dr. Turner's work. Of the propriety and u of this change, the editors believe no doubt will be entertai when it is remembered that the outlines are from the same that drew up a large part of the Organic Chemistry in the sev edition of Turner; that they are in reality compiled of the s materials, with the addition of some more recent results, all skilfully recast, and that they conform in notation and ge method with the inorganic portion of Dr. Turner's work.

In the department of Analytical Chemistry, the closing div of the work, the editors conceive that the present publication be admitted to present a very important improvement. This tion of the elements though enriched in the seventh edition b able sketch of Inorganic Analysis, written expressly for i Mr. Parnell, contains no account of the methods of *Org Analysis*, a subject of peculiar and perhaps leading interes its connection with modern chemical research. To remedy defect the editors have gladly introduced Liebig's outline of processes for analysing organic bodies, a treatise of the hig authority with all who are engaged in this departmen science, and one happily adapted to the wants of the prac student."

The union of these several treatises constitutes the most c prehensive work, as to facts and principles, and the proce and applications of the science of Chemistry, to be found in

English language. The task of the editors, it appears to us, has been well and ably performed, and we can most conscientiously recommend the present addition of Turner's Chemistry as the best adapted for the thorough study of the science of any with which we are acquainted.

Braithwaite's Retrospect of Practical Medicine and Surgery. No. XV., January to July, 1847.

We have received both the English and American editions of this useful publication. The "Uniform American Edition," which is a reprint of the English, is published by Daniel Adee, of New York, and the number before us contains 371 pages, octavo, of well selected matter. We very much wish that the American publisher would emulate the English in the mechanical execution of the work. The great efforts to sell American reprints at a very small price, which causes them to be driven through the press without being supervised by a qualified proof reader, and sent forth imperfectly printed and badly got up in all other respects, detracts very materially from their value. The constant misprints, especially in statistical tables, destroys all confidence, and, in fact, renders them quite valueless. This cheap publishing may do for novels and other light reading, when slight alterations or omissions can be discovered by the context, but in works of science it is really a serious matter. Besides, books which are to go into a physician's library for future reading and reference, should be constituted of permanent materials, and we have no doubt that publishers would find it to their advantage to bring out their medical publications in a style more befitting their contents.

THE MEDICAL EXAMINER.

PHILADELPHIA, SEPTEMBER, 1847.

NATIONAL MEDICAL CONVENTION.

The Report of the Committee on preliminary education will found on another page, to which we invite attention. The Comm tee justly observe that, "entirely destitute of the means of legal co pulsion, and depending for success, as the Convention must, sol upon the force of professional and public opinion, nothing could hoped from a standard above the circumstances of the country the times," &c.

This is undoubtedly a correct view of the case; at the same ti when about to erect a standard, one a little more elevated might well perhaps have been indicated, as where an object is distinc placed before the eye as a *sufficient* qualification, few will transce while many will fall short of the mark. Nevertheless, it is gre to be hoped that private preceptors, on whom "*the chief responsibi* rests," as observed by the Committee, will look to the recomm dation. While they encourage young men to enter their offi who are unprepared for the proper prosecution of the study medicine, with what reason can it be expected that the medical leges will spurn them? To take a young man's fee and keep two or three years in his preceptor's office, and then, when he plies to enter college, say to him, "go back to your primer, you are not prepared for the study of medicine," would be r injustice. It is the duty of every preceptor to inquire into the qu fications of a student, natural and acquired, before receiving him his office, and honestly inform him of what is requisite. Let this done, and the friends of reform will find that little more will rem to contend for. One who is possessed of a good education greater means and higher motives to spur him on in his pursuits, will be likely to select the best schools and emulate the highest amples.

THE CONCOURS IN FRANCE.

Among other reforms recently advocated, the French practic concouring for professorships has of late been highly commended

some of our brother journalists. In fact, we at one time advocated it ourselves, but afterward came to learn that its practical operation was not quite equal to its promises in theory. We understood from different sources, that instead of affording a true test, positive and relative, of the fitness of a candidate, it was liable to great abuses, and often led to deception: it was discovered, indeed, that many things were necessary fully to qualify a man to occupy a professor's chair beside those elicited by the concour. Our brethren of the Buffalo Medical Journal and of the St. Louis Medical and Surgical Journal, with many others, will be surprised to read the following, which we extract from the London Medical Gazette of the 16th of July.

"*Abolition of the Concours in France.*—The Chamber of Peers has come to a vote by which the system of election by Concours in France is abolished. Some of the noisy advocates of this electioneering practice are about to present a protest to the Chamber of Deputies against this vote, and to require a restoration of their favorite panacea for bringing out professional talent! But the feeling of the most eminent and experienced men in the profession is decidedly against the re-establishment of this system."

The introduction of this system into France some years since was hailed as the greatest improvement—as closing the door for ever upon favouriteism, and opening the portals wide to genius and learning! And now it is discovered that common sense and business qualifications are quite as necessary as genius and great learning, and that these are not always combined in the same individual. *Change*, in fact, has not turned out to be *improvement*. Not only the professors of the colleges, but likewise the physicians and surgeons of the hospitals, in France, were chosen by concour, and consequently the strife was going on all the time. "Thus," says the Gazette, "last year there were two vacancies for the situation of surgeons to the hospitals of Paris; *there were thirty-two candidates, and the concours lasted five months!*" Nothing could demonstrate the impracticability of such a system better than this fact.

YELLOW FEVER.

Yellow Fever is prevailing in New Orleans more extensively than for a number of years past. On the 19th of last month, the interments of those who died of this disease amounted to seventy-seven, which, considering that a very large number of the inhabitants are always absent during the summer months, and many more fly on the

first announcement of the fever, must be regarded as a very la
proportion to the number of inhabitants.

At Vera Cruz, also, the vomito, or yellow fever, continues to p
vail, but attended with less mortality, we should infer from what
see in the newspapers, than at New Orleans.

SHIP FEVER.

Typhus, or Ship Fever, continues to prevail to some extent amo
the emigrants to our principal ports, more especially those from I
land. The greater abundance of food, however, will soon effec
change—in fact, has already materially lessened the number of ca
arriving in this country as well as in Europe. Whenever the dise
has appeared among others than emigrants in this country, it
been only such as were particularly exposed to it, as the inmates
the houses of the sick, and their attendants, including nurses a
physicians. Several valuable lives among the latter have been lo
especially in New York and Canada.

RECORD OF MEDICAL SCIENCE.

*Report of the Committee on Preliminary Education, appoin
under the 5th Resolution adopted by the National Medical Conventi
of May*, 1846.—The duty entrusted to the Committee was "To
port on the standard of acquirements which should be exacted
young men, before being received as students of medicine."

Before attempting to perform this duty, the Committee thought
desirable to ascertain, by inquiries addressed to the medical scho
and distinguished practitioners of medicine throughout the Uni
the sentiments and practice of the profession on this interesting su
ject. They, accordingly, prepared a circular, the object of whi
was to ascertain the views of the various Medical Schools in rega
to the standard of preliminary education which it is proposed to ex
of young men about to commence the study of medicine; and a
to invite any suggestions they might think proper to make. Cop
of this circular were sent to the (then) thirty-six Medical Schools
the United States, and official replies have been received from six
this number; namely, the Medical Department of the University
Pennsylvania, the College of Physicians and Surgeons in the City
New York, the Medical Institution of Yale College, Ohio Medic
College, Albany Medical College, and the Medical Faculty of Da
mouth College. These institutions are desirous of having a standa

established, and the Committee do not doubt that they, as well as others, will cheerfully co-operate with the Convention and the profession in this desirable reform.

Another circular was addressed to distinguished medical practitioners residing in all the States and Territories of the Union, soliciting replies to the following four questions.

1. Is it the custom of your State or neighborhood to require of young men, who desire to study medicine, any particular amount of preliminary education?

2. If so, what are the details of your standard?

3. By what authority, whether of a State Medical Society, local Association, or common consent, is this standard established?

4. What may be considered the general sentiment of the profession in your vicinity, in regard to the establishment of such a standard as is contemplated in the 5th resolution of the National Medical Convention of May, 1846?

The Committee have been favoured with very full and explicit answers to this circular from thirty-nine gentlemen, representing twenty-one States of the Union. The replies which have been received to the first three questions, establish the fact, not only that there is no uniform standard of preparatory education exacted of medical students throughout the United States, but that there is no general rule adopted in any particular state or district, which has been authorized or recommended by Medical Societies or other official bodies, or established by common consent and custom. The whole subject is left to private preceptors, many of whom recommend, and a few exact, an elevated standard, while others leave it to the discretion of the students themselves, or their parents. But all the letters of the practitioners indicate, without an exception, the cheering fact, that the profession is alive to the want of a standard, is desirous that one should be established by the Convention, and is willing to sustain it.

The fourth question was designed to elicit the general sentiment of the profession in regard to the nature and extent of the preliminary education which should be required of medical students. On this subject, the correspondence shows a considerable diversity of opinion; and the standard of different writers varies from a "common school" education up to the highest collegiate attainments. Some advocate a different scale in different sections of the country, while a majority is in favour of having the standard uniform throughout the Union. And, notwithstanding the individual differences of ideas, there is a sufficient general concurrence in the views of the writers to enable the Committee to recommend a scale which is chiefly based upon their united suggestions.

Your Committee are aware of the difficulties the Convention would discover in fixing the standard of preliminary education for medical students as high as would be desirable. Entirely destitute of the means of legal compulsion, and depending for success, as the Convention must, solely upon the force of professional and pubiic

opinion, nothing could be hoped from a standard above the circu stances of the country and the times. The existing evil can reached only by the concurrent action of private medical precept and the medical schools of the country. The chief responsibi rests with the preceptors; and to them the Convention should m its strongest appeal; but at the same time they should be encoura and sustained by the co-operation of the schools, without which, deed, the efforts of preceptors could be but partially successful.

The object to which the Committee has directed its labours, i believed, can be best effected by the Convention in the follow way:—

1*st.* By establishing a uniform standard of preliminary educa for medical students, which shall be of a moderate character—in first instance, too low, rather than too high—and yet of such ex as will insure both the knowledge and the mental discipline ne sary to those who would enter a profession full of labour and resp sibility, without excluding meritorious young men of limited me and opportunities.

2*d.* By earnestly recommending every medical preceptor to ex this standard of every young man, before admitting him into office; and having exacted it, to grant him a written certificate to effect, specifying also the period of his admission into the precept office, as a proper warrant and credential for the student, when ab entering a medical college.

3*d.* By requesting all the medical colleges of the country to quire such a certificate of every student applying for matriculati and, in publishing their annual list of graduates, to accompany name of the graduate with the name and residence of his precep the name of the latter being clearly and distinctly presented as ce fying to the qualification of preliminary education.

These ideas the Committee have put into the form of distinct re lutions, which they append to their report, submitting both for consideration of the Convention, and, if it think proper, its adopt

1*st.* *Resolved*, That this Convention earnestly recommends members of the medical profession throughout the United States satisfy themselves, either by personal inquiry or written certificat competent persons, before receiving young men into their offices students, that they are of good moral character, and that they h acquired a good English education, a knowledge of Natural Philo phy and the Elementary Mathematical Sciences, including Geome and Algebra; and such an acquaintance, at least, with the Latin Greek languages, as will enable them to appreciate the techn language of medicine, and read and write prescriptions.

2*d.* *Resolved*, That this Convention also recommends to the m bers of the Medical profession of the United States, when they h satisfied themselves that a young man possesses the qualificati specified in the preceding resolution, to give him a written certific stating that fact, and recording also the date of his admission a medical student, to be carried with him as a warrant for his recept

into the medical college in which he may intend to pursue his studies.

3*d. Resolved*, That all the medical colleges in the United States be, and they are hereby recommended and requested to require such a certificate of every student of medicine applying for matriculation; and when publishing their annual list of graduates, to accompany the name of the graduate with the name and residence of his preceptor, the name of the latter being clearly and distinctly presented as certifying to the qualification of preliminary education.

Signed by JAMES COUPER,
L. P. BUSH,
JAMES W. THOMSON,
ALDEN MARCH,
WASHINGTON L. ATLEE,
D. T. BRAINARD,
} *Committee.*

Peoria District Medical Society.—Pursuant to public notice a number of the regularly qualified practitioners of medicine of Peoria, Tazewell, McLean, Woodford, Putnam, Bureau, Stark, Knox, and Fulton counties, in the state of Illinois, met at the court house in the city of Peoria, on Tuesday the 13th of July, and organized the "Peoria District Medical Society."

The following persons were admitted as members:—Rudolphus Rouse, Peoria; A. G. Henry, Pekin; Francis A. McNiel, Peoria; L. A Hanaford, Trivoli; Edward Dickinson, Peoria; Joseph C. Frye, Peoria; Elwood Andrew, Peoria; Thomas J. Moore, Trivoli; S. Christy, Farmington; G. H. Hickman, Farmington; O. N. Williams, Farmington; Wm. Cromwell, Pekin; M. B. Van Petten, Trivoli; H. H. Sexton, Galesburgh; E. M. Colbourne, Bloomington; Uri P. Golliday, Kickapoo; Alvah Leonard, Kickapoo; John L. Huff, Maquon; Charles Cutter, Princeville; T. P. Rogers, Washington; John Riley, Henderson; Alanson Stockwell, Tremont; E. V. Garfield Toulon; Jerome B. Tenney, Tremont; John Murphey, Peoria; G. P. Wood, Washington; Robt. B. M. Wilson, Peoria; John B. McDowell, Lewiston; Thomas Hall, Toulon; A. H. Lace, Bloomington; N. S. Tucker, Peoria.

The following officers were elected for the ensuing year:

President.—F. A. McNiel, M. D.

Vice Presidents.—A. G. Henry, M. D., J. C. Frye, M. D.

Recording Secretary.—E. Andrew, M. D.

Corresponding Secretary.—Jno. Murphy, M. D.

Treasurer.—E. Dickinson, M. D.

Censors.—Drs. R. Rouse, E. M. Colbourne, T. P. Rogers, H. H. Sexton and Thomas Hall.

The next meeting of the society will be held at the court house, in the city of Peoria, on the first Tuesday of November next, to which all qualified Physicians, desirous of becoming members, are invited

to attend. The delegates to the American Medical Association be appointed at the November meeting.

An address will be delivered by the President—one or mor tures, by persons appointed for the purpose—after which, the ne pathology, and treatment of congestive fever, will be discusse the members of the society.

E. ANDREW, Secreta

Account of a Physical Sign of Pneumonia of the Apex o Lungs. By WM. M. BOLING, M. D., of Montgomery, Ala.—M perience, so far as it extends, is confirmatory of the opinion pneumonia, commencing at the apex of the lung, is, in proportio the number of cases, the most frequently fatal form of the disea have met with about six cases of this affection, at least have re nized, or identified about that number. They all proved fatal. I notice three of them :—In one, the subject of which was a pow and robust Irishman, 30 years old, "fond of a dram," but not dedly intemperate, and previously in good health,—the disease su vened on an attack of acute bronchitis, about the fifth day, and ved fatal on the fourteenth day, counting from the first of his illn In the second case, the patient was a rather delicate negro wo about 28 years old,—the attack commenced during a slight indis tion of a catarrhal character, and proved fatal on the thirteenth The other patient was a strong and robust negro woman, abou years old, previously in good health, and in her case the termin was on the ninth day.

The general symptoms and march of the disease, in these, did differ in any material point, from those in the more common form pneumonia, except in the point of commencement, and in this haps—that the morbid alteration had proceeded to a less exten the time of death, than is commonly the case in the latter; tha death supervened from a less extensive local disease. In the o cases, the lung ran most rapidly into a state of hepatization, the sc ification not being preceded by the crepitant bronchus, but by a t absence of the respiratory murmur, while the chest over the affe part remained still resonant on percussion.

My object, however, in the present remarks, is simply to speal a physical sign that was present, in each of the three cases detai which I presume also to be present in others of the same charac the observance of which may probably lead to a correct diagnosis an earlier period, in some instances, than it would otherwise be ma This is a fine mucous or crepitant rhonchus, seemingly seated in larynx, loud enough to be heard distinctly at the distance of two three feet from the patient, and so *persistent*, that it is not removal or but momentarily, by any effort to expectorate which the pati may make, while at the same time there are present none of signs of bronchitis or laryngitis. Though it is exceedingly annoy to the observer to hear it, because it impresses him with the bel that it is distressing to the patient, and he looks with a feeling rath

of impatience for an attempt, by an effort to expectorate, for its removal; the patient seems perfectly indifferent to its presence, which would not be the case were it really produced by the presence of a small quantity of tenacious mucus in the larynx itself. The sound, then, is only seemingly produced in the larynx, for on applying the stethoscope immediately under or just above the clavicles, it will be discovered to proceed from the apex of one or the other lung, which will be found the seat of inflammatory action. It would seem that the sound there produced in the pulmonary vesicles, must be conveyed by the larger bronchial ramifications, numerous and superficial at this point, to the larynx, where, in consequence of the thinness of the tube, or rather the thinness of its covering, and its proximity to the surface, the deceptive impression of its production in this organ, from the presence of a small quantity of viscid mucus, is created.

It is the indifference of the patient to the presence of the sound, but still more especially its *persistence*, which constitutes its peculiar and distinctive feature, and upon which its value as an evidence of pneumonia commencing in the apex of the lung depends. In other affections of the lungs and air passages, more especially in bronchitis, we may have a somewhat similar sound produced in the larynx itself, by the play of the passing air through a small quantity of viscid mucus there collected; but under such circumstances, it is removable by coughing, or an effort to expectorate, and once removed may not return again, or only after a considerable interval, when a fresh collection of mucus has taken place. The patient, too, does not manifest the same indifference in regard to its presence, but the mucus producing it soon excites an effort for its removal.

As pneumonic inflammation, in the greater number of cases, commences at the base of the lung, the inexperienced stethoscopist, on observing the general symptoms of pneumonia present, may neglect to apply his instrument over the apex of the organ in attempting to discover the location and extent of the disease, and failing to detect any physical evidences of morbid action near the base, might at once attribute the symptoms present to inflammation, somewhat circumscribed, of the central portion of the pulmonary texture; too limited in extent, and too remote from the surface, to give rise to the peculiar physical phenomena. To be sure, were he to examine the entire chest, the disease would be detected. The recollection of the sign which I have named, leads at once to its locality.

It is altogether probable, that in a number of instances of this kind, the exact seat of morbid action has escaped my own observation, as the peculiar sign which I have spoken of, I considered indicative of the most extreme danger, long before I discovered its connection with inflammation, commencing at the apex of the lung.—*American Jour. of Med. Sci.*

Case of Ligature of Common Carotid, for removal of Parotid Gland.—By A. B. Shipman, M. D., Professor of Surgery in Indiana Medical College.—(Communicated by Dr. Norris.)—Mrs. ——, ætat.

70, spare habit, but good general health, had a tumour at the ang
jaw, of four years' standing. (She resided in Tully, Onondaga
New York.) The tumour was about the size of an orange, very h
with lancinating pains through it. Diagnosis, schirrus of the pa
gland. It was determined to extirpate it. Previous to extirpa
it was decided to tie the carotid, which was done by myself, and
Narmon Van Dusen, of Tully. At the commencement of the op
tion, considerable hemorrhage attended, but, the operation was fi
ed, and the patient recovered, the wound healed, and the liga
came away on the 28th day of the operation. The patient was
one year from the operation, but I understood the tumour retu
again in the course of two years, and she finally sunk under it.
she recovered perfectly from the operation of tying the carotid.
was in May, 1844, and has never been reported before.—*Ibid.*

Case of Excision of the whole of the Genital Organs.—By E.
H. Beck, Asst. Surg. U. S. A. (Communicated in a letter to
Editor, dated, U. S. Hospital, *Matamoras, Mexico.* May 8, 1847
Sir.—Permit me to report to you a case that lately came under
care, which, from its oddity and interest, is certainly entitled to a
in your excellent journal. J. B., ætat. 31, stout build, bilious
perament, had been a member of the army, but now in the pos
of bar-beeper in a grocery; on the evening of March 9th, during
of delirium tremens, and unmanageable behaviour, was confine
the guard-house. A few minutes after his confinement he borr
of a fellow-prisoner a short, thick, one-bladed, pocket knife,
which he completely excised the whole of the genital appar
close to the body. Flinging them violently into one corner o
room, he very heroically remarked—"Any d—d fool can cu
throat, but it takes a soldier to cut his privates off." This w
seven and a half o'clock. His companion gave the alarm, an
surgeon of the Mississippi regiment, happening to be in the
building, got to him about ten minutes after the accident. E
effort was made to secure the spermatic arteries, but their imme
retraction was so great that he failed in getting them. I was
for in consultation, but being absent from my room at the time
courier returned to the doctor stating the fact. The man was blee
to death, and, in the desperation of the moment, he determin
apply the actual cautery to the bleeding surface.

At eight o'clock, a few minutes after its application, I saw
and as the bleeding had almost entirely ceased, a large bunch of
was applied as a compress, and secured by the appropriate b
ges; his hips a little elevated; cold applications to the abdomen
perfect rest and quiet for three hours; at which time he was rem
to the General Hospital, and placed in the surgical ward unde
care. The amount of blood lost was estimated by all present at
or quite one gallon. One fact worthy of notice here is, that eig
ten minutes after the bleeding commenced, complete consciou
was restored, nor did he exhibit a symptom of *delirium tremens,*

wards. On my visit next morning, he lamented his condition as a sensible man, asked my opinion of his danger; complained of no pain; skin cool; pulse slightly jerking, and tremulous; 88 in frequency. I ordered him barley water, and, fearful of hemorrhage, did not disturb the bandages until a disposition to pass water, which was early the following morning. To remove the dressing the more easily, a soft poultice was applied; and after some difficulty in finding the urethra and passing the catheter, evacuated the bladder, with but a little oozing of blood from the surface and one minute artery, which I secured by torsion. Ever after this, his water passed without artificial assistance; his pulse became equal and soft after a gentle aperient, and absolute diet. Dry dressings—until a yellowish sloughy secretion was coming off, when I washed with a solution of chlorinated soda, and applied simple cerate. The too luxuriant granulations, which soon arose, were suppressed with caustic, and the whole had kindly cicatrized in five weeks from the occurrence of the accident.

The last few days of the healing process, a large silver catheter, and afterwards, an oiled tent, was retained in the urethra, to prevent any contraction, to which there was a great tendency, and around which the orifice closed with a firm callous edge. The superior surface, or that above the urethra, presents a flat, or rather concave appearance, the posterior slightly elevated or ridge-like.—*Ibid.*

Poisons and Counter-Poisons Therapeutically considered. By M. Bouchardat.—Hôtel Dieu, in consequence of its central location, is the hospital most frequently selected by the administration and people of Paris whenever any accident or case of sudden disease occurs requiring immediate assistance. Among these there are of course a great many cases of poisoning, to which my attention has consequently been frequently directed. I have made also a great many experiments on animals in reference to counter-poisons, so that I think myself capable of giving some very useful information on this subject. I intend in this article to embody the results of such researches which have been as yet unpublished or scattered throughout my "Formulaire," my "Annuaires," the second edition of my "Manuel de Matière Médicale," or any other publications of the last year. I publish this notice in my "Annuaire" of 1847, because it is a work destined for the hands of both physicians and pharmaceutists, for I think that a thorough knowledge of certain parts of therapeutics is as necessary for the latter as the former; in fact, in urgent cases which call for immediate attention requiring a very exact knowledge of their nature, we are obliged to call upon the pharmaceutist, who is always at home, while the physician is very liable to be absent. In this respect there is a great deficit in the education of the pharmaceutist, which can only be remedied at present by publications like the one I here give.

The assistance required by any individual who has been poisoned may be considered under three heads. The poison having been discovered, the first indication is to evacuate it. For this purpose we em-

ploy emetics, emetics and cathartics together, purgatives, or the mach-pump. The second indication is to administer the antidote. third is to bestow upon the patient those attentions his condition quires, and which may be divided into those suitable in all cas poisoning, and those adapted to each particular case.

1. To evacuate the stomach of its poison, tartar-emetic is generally had recourse to; the dose is five centigrammes ($\frac{2}{3}$ grain) dissolved in half a tumbler full of water, and repeated tw three times after an interval of a few minutes. The patient sh drink freely of tepid water, and it is often advantageous to assis inclination to vomit by tickling the fauces. If tartar-emetic is n hand, it may be substituted by the sulphate of copper, twenty c grammes, (three grains,) dissolved in two table-spoonsful of w and repeated if necessary; sometimes this emetic is preferable t former because it acts more promptly.

When the poison is insoluble, and there is reason to believe it has passed out of the stomach into the small intestines, it is b to administer an emetic and cathartic combined. Twenty c grammes (three grains) of tartar-emetic may be dissolved with grammes (two ounces) of sulphate of soda or magnesia in two of water, and then administered to the patient as rapidly as he take it. It has been recommended in cases of poisoning from v table substances to use a strong solution of table salt, which acts as an emetic and a cathartic, 50 grammes (an ounce and a ha to the litre (two pints) of water. This is at times a very valu therapeutic agent because it is always at hand, and we canno minister an evacuant too soon.

When the poison has been taken per anum, and has entered large intestines, we must have recourse to enemata. A very e lent enema may be prepared in these cases composed of tw grammes (five drams) of senna, fifty grammes (an ounce and a of sulphate of soda and five hundred grammes (one pint) of w this injection is much better than those more drastic in their ac these are slower in their operation, and I have often seen them scribed without success. When we cannot succeed in procu emesis, and the poison is still in the stomach, it is best to intro the stomach tube and pump out the contents.

2. A counter-poison is, according to my view, any subst which will form an insoluble or inoffensive compound with the p which has been taken. There are some general rules which it is n sary to mention in reference to the employment of these counte sons. We ought to give the preference to those which are perf innoxious, and which are most likely to be at hand. We should minister a quantity which will more than suffice to neutraliz poison, for the antidote may be rejected almost as soon as it is s lowed, and in the most fortunate cases even the compound i wholly insoluble; then again we wish to destroy the poison as qui as possible, and we can do this most readily by having the ant in excess.

There are several counter-poisons which form compounds with the poisons which are possessed of a slight degree of solubility; these may after some time become redissolved in the intestinal canal, and cause a return of the bad symptoms. In these cases it is necessary to induce full evacuation of the stomach and bowels after administering the antidote.

When the poison has passed into the small intestines an insoluble counter-poison should be selected, otherwise its action might be limited to the stomach.

3. Poisoning is a disease produced by a known cause, and it is necessary to treat it with those remedies whose powers we have learned by experience. In almost if not quite all cases of poisoning, death results as a consequence of the great disturbance which takes place in the organs of respiration and circulation. It is necessary, therefore, to watch these organs, the constant exercise of whose functions is indispensable to life, and to take every means to prevent their suspension, for with their suspension comes death.

The circulation is to be kept up by sustaining the animal heat by means of warm clothing, frictions, hot water and sinapisms applied to various parts; sometimes it is well to practice moderate venesection. Respiration is assisted by the free admission of fresh air, by alternate pressure on the walls of the thorax, by blowing into the nostrils, or by galvanism. When the secreting organs eliminate readily any poison that may have been absorbed, it is important to increase the activity of such, as Orfila has recommended in advising the use of diuretics in poisoning from antimony and arsenic which are separated from the blood by the kidneys, and as we have recommended in prescribing those articles which increase the secretion of bile when the poison is separated by the liver;—this is the case with almost all the mineral poisons.

When the poison has been absorbed and cannot be easily and quickly removed from the economy, and if we cannot act upon it in the blood with the antidote, we must have recourse to remedies which are not injurious in themselves, and yet counteract the effects of the poison. This is the way that coffee acts in poisoning from opium.

We shall now commence the particular consideration of the individual poisons.

Poisoning from Acids.

I think I have explained in the most satisfactory manner the therapeutic effects of poisoning by acids.

In cases of poisoning from acids, the antidote alone is sufficient to restore the patient, without having recourse to evacuants.

All authors on therapeutics and toxicology recommend for neutralizing the acids the administration of magnesia, alkaline carbonates, soap, &c.; this is all very well, but it does not suffice. I think I have done a great service in founding a precise treatment to be pursued in these cases of poisoning.

In the first place (as recommended by every one) we must ad-

minister magnesia in excess; I prefer the hydrated magnesi preparation of which will be given in another place, in speaki M. Bussy's work on an antidote for arsenious acid. This alk earth possesses some very great advantages; it is innoxious, p tive and insoluble, so that it can pass into the small intestine neutralize any acid that may have passed into them; but its in bility unfits it for fulfilling one very important indication. I proved that in cases of poisoning by sulphuric acid, the acid i sorbed, and that when it gets into the blood it may cause clots to which will interfere with the circulation and thereby cause de It is necessary, therefore, to follow up the sulphuric acid whic been absorbed, by giving after the magnesia some soluble alk substance which will be readily absorbed, and dissolve the which may be forming. The best alkali for this purpose is th carbonate of soda. It should not be given before the magn because the large amount of carbonic acid which would be d gaged might facilitate those perforations of the stomach which a much to be feared in poisoning by acids. Magnesia is not liab this objection; and we must first neutralize with it the acids cont in the digestive organs. The following is the formula which I often adopted in these cases of poisoning.

1. Twenty to fifty grammes (five to twelve drams) diffused litre (two pints) of water.

2. After the use of the magnesia, the patient must drink free a solution of bicarbonate of soda, ten grammes (two drams) t litre being a good proportion for the solution.

Since I have been connected with the Hôtel Dieu, this treat has been adopted at my request several times in very grave c and it has always been successful. It has been prescribed in c of poisoning from sol. of indigo in sulphuric acid, from sulp acid diluted with its own weight of water, and from nitric acid.

N. B. It must be remembered that this treatment will not an where the soda salts formed by the acid are poisonous, as is the with arsenic acid, &c.

Poisoning from Alkalies.

The only treatment in these cases is that recommended by al thors. It is necessary to administer lemonade, or vinegar and w in a sufficient quantity to neutralize the alkali which has been ta If potassa or its carbonates have been taken, I prefer tartaric aci the potassa salts are not so innoxious as is generally supposed, the bitartrate of potassa is the least objectionable of them.

Poisoning from Arsenious Acid.

Within a few years there have been a great many experim made to discover which is the best antidote for arsenious acid,

* In two cases, I, as well as C. Couriard, have found these clots lodged a commencement of the femoral artery, in consequence of which the circulati that leg had been stopped and mortification brought on, which caused the of the individual.

the matter appeared to be entirely settled until some new views of M. Bussy have made very important additions to this subject.

M. Bussy has shown that magnesia, by forming an insoluble compound with arsenious acid, may be very advantageously employed in cases of poisoning by it;—M. H. Lepage has sent him a communication which goes to prove the efficacy of this new antidote. Although this may be the case, until the magnesia be well tested I should be unwilling to give up the hydrated sesquioxide of iron which M. Landras and I have thoroughly tested in various cases by experiments on animals.

If I were called to-day to render my assistance to a person poisoned by arsenious acid, this is the way in which I should act.

In the first place I should bring on emesis, according to the rules given above; then I should give the hydrated sesquioxide of iron diffused in two litres (four pints) of sweetened water. It is necessary to give this antidote in great excess, for, as M. Orfila has proved, if we give only what is actually necessary to form the arsenite of the peroxide of iron [properly, the subarseniate of the protoxide of iron] the power of the poison is not wholly destroyed.

If there is no hydrated sesquioxide of iron at hand, we must not hesitate to give *thirty grammes* (six drams) of the subcarbonate of iron, diffused in a litre of water while the former is being prepared. Experience has proved to us the great value of this course of treatment.

Our experiments on dogs have shown likewise that the persulphuret of iron in jelly is an antidote to the arsenious acid.*

I think it much better, however, at the same time, that we give the hydrated sesquioxide of iron, to administer twenty grammes (half an ounce) of magnesia. This must be a very valuable agent, not only because it forms an insoluble compound with the arsenious acid, but also because it purges and in that way follows up any arsenic that may have got into the intestines, and by increasing the number of evacuations it is likely to carry it off. To repeat then, I would give the hydrated sesquioxide of iron and magnesia both together; and as

* M. Mialhe has lately again strongly recommended the employment of the protosulphuret of iron in poisoning from arsenic, but in the experiments we have made, this article is much less efficacious than the hydrated sesquioxide of iron.

The persulphuret of iron is a very good antidote for several metallic substances; it acts like the protosulphuret to which M. Mialhe drew attention at the same time that M. Sandras and I were engaged in the experiments published in our article on the counter-poisons of arsenic, lead, mercury and copper, (Annuaire Thérapeutique, 1844.) We cannot admit with M. Mialhe the non-existence of the hydrated persulphuret of iron described by Berzelius: this compound is always formed when the alkaline persulphuret is in excess; but this is not the case when there is an excess of the persulphate of iron. We insist on this with M. Berzelius, and we have said that it was indispensable that the persulphuret of iron should be poured into the persulphuret of potassium.

We must observe also that the persulphuret of iron changes very rapidly when exposed to the air, sulphur being set free. This is the reason why we recommend it to be prepared with saccharine matter, and to be kept in well-stopped bottles.

this latter substance only acts when prepared in the manner given M. Bussy, I shall give its preparation.

After administering the antidote, if the pulse is feeble and the cold, we must favor reaction by sinapisms, warm coverings, fricti small bleedings, stimulating drinks, &c. When the cold stag past and is followed by reaction, at the same time that we keep bowels in an open state, we should give diuretic, nitrous drinks recommended by M. Orfila. In this way we will hasten the rem of the poison from the system, both by the bowels and by the neys.

Preparation of the Magnesia employed as an Antidote for Arsen Acid.—(Bussy.)

Magnesia of the proper kind may easily be obtained in the foll ing way: Fill a crucible half full of the carbonate of magnesia the shops, then heat it until the bottom becomes of a dull red, during the calcination the magnesia is to be constantly stirred with iron spatula. When it is completely calcined the ebullition cau by the escape of the water and carbonic acid ceases, then a por should be tested with muriatic acid, and if the calcination is comp there will be no escape of carbonic acid; but it is better not to fectly calcine it than to expose it to too great a heat.

When the magnesia has been properly prepared it forms a drate without any difficulty; it makes with water at the ordinary t perature a consistent jelly, like alumina; two grammes of magn are sufficient to do this, with fifty grammes or more of water.

This quantity of magnesia diffused in a decilitre (three ounces water, is capable of combining, as we have said, with one decigram (one and a half grains) of arsenious acid dissolved in a decilitre of wa so that after agitating them together for a moment and filtering, th will be no precipitate formed with sulphuretted hydrogen.

It is necessary to be careful not to use magnesia which has b too highly heated, or its effect will be almost entirely destroy Such magnesia is easily recognised in this way. Its density and cohesion are greater than they should be, and instead of uniting v the water it falls to the bottom and forms a pulverulent deposit wh may rest several months in contact with the water without becom hydrated.

Hydrate of magnesia may also be prepared by precipitation, this is very efficacious in cases of poisoning. 100 grammes of phate of magnesia in crystals contain 51.22 of water, 16.26 of m nesia, and 32.52 of sulphuric acid. It requires theoretically 38.2 pure potassa, or 45.52 of the hydrate to decompose completely a lution of 100 grammes of the epsom salt and precipitate from it magnesia in a hydrated form. But if instead of the pure potassa take the ordinary caustic potassa, which always contains some c ride, sulphate, and carbonate, and an excess of water, it is best take fifty for every hundred parts of salt to be decomposed. If solutions are well diluted; if the sulphate of magnesia, for instanc

dissolved in twenty-five times its weight of water, and the potassa in twenty times its weight, it will not be necessary to wash the precipitate, but simply to express the excess of liquid between the folds of linen; the small quantity of sulphate of potassa and of sulphate of magnesia contained in it can have no injurious effect. For administration it is best to diffuse the precipitate in a large quantity of water. Ten grammes of sulphate of magnesia dissolved in 250 grammes of water, decomposed, as above directed, by five grammes of caustic potassa dissolved in 100 grammes of water, will still leave a liquid containing an excess of sulphate of magnesia, which might still be precipitated with potassa. The precipitate prepared according to the above proportions, when dried between the folds of linen without being washed, and then diffused in water, will combine immediately with one decigramme of arsenious acid dissolved in a decilitre of water. I may observe that this proportion of arsenious acid is not at all the maximum quantity the magnesia is capable of neutralizing. The calcined magnesia when properly prepared appears to me just as good, and is more readily made than the precipitated hydrate.

Poisoning from Corrosive Sublimate and other Salts of Mercury.

M. Orfila has discovered that albumen is an excellent antidote for corrosive sublimate; its efficacy has indeed been proved in a great many cases; it is a substance very frequently employed, and is in the hands of every one, while at the same time it is very safe.

The moment any symptoms indicating poisoning by mercury show themselves, the patient should take some yellows and whites of eggs mixed with water. Too much albumen must not be taken, for if it did not vomit it might redissolve the precipitate.

It will be well at the same time to make the patient swallow immediately, or as soon as it can be procured, 50 grammes of hydrated persulphuret of iron, or 10 grammes of Raciborski's iron, the efficacy of which has been proved by M. Sandras and myself in cases of poisoning by the salts of mercury.

It is indispensably necessary to favour emesis and purging by the free use of fluid, mucilaginous drinks. Cullerier saved two hundred patients who had taken over doses of corrosive sublimate, by making them each drink in the course of twenty-four hours seven or eight litres of milk, flaxseed tea and warm water.

Poisoning from the Salts of Copper.

The best counter-poison for the salts of copper, the certainty of which I together with M. Sandras have proved by experiments on animals, is the metallic iron reduced by hydrogen; it must be administered in a quantity at least as great as that of the poison which has been taken.

If the hydrate of the persulphuret of iron can be had, it may also be prescribed with a great deal of benefit. 100 grammes of the hydrate diffused in 200 grammes of sugar and water may be given.

If neither Raciborski's iron nor the hydrate of the persulphuret is

to be had, albumen and water must be given, (six whites of
mixed with a litre of water.) The albumen forms insoluble
pounds with the salts of copper, as has been proved by Orfila i
peated experiments.

There has been a great deal of discussion on the utility of s
in cases of poisoning from the salts of copper. The advocat
this substance maintain that the poison is decomposed by it.
explanation is erroneous; in fact, if the sugar, together with the
tric juice, is able to act at all on the salts of copper, it is at a hi
degree of temperature than is ever found in the stomach. I k
that persons poisoned by copper have been saved by being cram
with sugar, and by being vomited and purged at the same time
the action of the sugar is different entirely from what they suppo
M. Sandras and I in our experiments on sugar as a nutriment, f
that when it was given in excess, absorption was very consider
diminished, in accordance with the laws given by M. Dutrochet
is easy to understand, therefore, how sugar may be useful while
poison is being removed by emetics and cathartics; but it ca
rank with counter-poisons, but with evacuants and substances w
lessen absorption.

Poisoning from the Salts of Lead.

There are three things to be considered in the treatment of po
ing by the salts of lead.

1. The treatment of active poisoning by those salts taken in l
doses and a small number of times.
2. The treatment of slow poisoning.
3. Prophylactic treatment.

I have already spoken of the two last heads in the second ed
of my work on Materia Medica, and I have republished it i
"Annuaire" of 1846. I only give in this number the recipe fo
syrup of the hydrate of the sulphuret of iron which M. Sandra
I have adopted, (page 101.)

It only remains for us to speak of the first head, or the active
soning by lead.

The counter-poison on which the most reliance is to be plac
the hydrate of the persulphuret of iron, which must be given t
patient in excess. It is best to administer the hydrate mixed
once or twice its weight of this syrup. If the hydrated sulphu
iron cannot be had, 50 grammes of sulphate of soda or mag
may be prescribed.

In both cases we may bring on vomiting and purging by the a
ance of two drops of croton oil.

Poisoning by Sulphuretted Hydrogen or by the Effluvia of Pr

In these cases of poisoning chlorine must be breathed by th
tient, with caution, however. M. Labarraque saved a privy-cl
who was asphyxied, by placing under his nose at intervals a sp
applied in a solution of chloride of soda. If the chloride of so
not to be had, and all success depends on prompt action, we ma

at any grocer's the "eau de Javelle," which is a chloride of potassa, with which a sponge should be wet and carried cautiously under the nose of the patient. The disengagement of chlorine may be increased at pleasure by pouring a few drops of vinegar on the sponge. Another way, recommended by M. Mialhe, for obtaining a slow and gradual disengagement of chlorine, is to enclose in a compress a handful of the chloride of lime, and to pour on it a few drops of vinegar.

When the patient begins to breathe he must have fresh air, and the circulation must be kept up by brushing the skin with a flesh-brush, and by wrapping him with warm coverings. Venesection should be practised, and then he should take an anti-spasmodic potion with two grammes of ether.

Poisoning from the Liver of Sulphur, or its solution, known as the "radical de Barèges, solution pour bains sulfureux, sulfure de potasse liquide," (*or by any alkaline sulphuret.*)

Vomiting must be obtained immediately in these cases by administering freely of tepid water, warm mucilaginous drinks, and by tickling the fauces; if these means do not cause emesis, the stomach-pump must be used. Neither the tartar emetic, nor the sulphate of copper or zinc can be used, because they are decomposed by the alkaline sulphurets. We administer afterwards, so long as the matters ejected have the odour of putrid eggs, the solution of ten grammes of the proto, or what is better, of the persulphate of iron, in one litre of water, with 200 grammes of sugar, in divided doses. Instead of the sulphuret of potassium, which is poisonous, we will have the sulphate of potassa formed, which is purgative, and the sulphuret of iron, which is insoluble. I have lately discovered and proved the efficacy of this antidote, which is very valuable, for the double decomposition is instantaneous, and the two compounds which result are innoxious; but as the sulphate of iron is poisonous of itself, we must watch its employment, and stop giving it as soon as the vomited matters contain no alkaline sulphuret.

Poisoning from Hydrocyanic Acid.

1. There is no time for administering an emetic.

2. In poisoning by hydrocyanic acid the antidote must be administered immediately; for if death follows at all, it does so quickly.

When the acid is anhydrous, or even diluted with its own volume of water, it acts so quickly that M. Larroque thinks there are no hopes in administering the antidote; but if it is the medicinal acid, and especially if that has been diluted, the absorption is much more gradual, and we may hope for success in administering the antidote of M. Smith, which may be prepared beforehand, as follows, and which, according to M. Larroque, may be kept several months by the following precautions: To the solution of the two sulphates of iron we add a solution of sugar; we then precipitate with the carbonate of soda, and keep it in vessels filled and closely stopped.

Sugar,	60	grammes.
Sulphate of protox. of iron,	55	"
Bisulph. of deutox. "	90	"
Water,	250	"
Carb. of soda in crystals,	500	"

Chlorine employed concurrently with the counter-poison of Smith may be of great service.

3. When the animal is apparently lifeless, free effusions of water on the spine should be made. I, as well as M. Louyet, tested this plan, recommended by Dr. Robinson.

Poisoning from Vegetable Alkalies and Substances which contain

The largest proportion of the vegetable alkalies may be rega as very dangerous poisons to man. They act in small doses an very quickly absorbed. It is of the greatest importance, therefo evacuate the stomach of them as quickly as possible, accordin the directions previously given.

The only counter-poison which has been as yet discovered, i compound solution of iodine. I have given in my "Annuaire" of all the details of the insoluble compounds which result from th action between this preparation and the vegetable alkalies; they ioduretted hydriodates, and are insoluble in acidulated water. all the insoluble compounds formed with a vegetable alkaline there is none which is so insoluble in acidulated water as this.

The following is the formula which I make use of for an anti to vegetable alkalies:

Iodine,	20	centigrammes.
Iodide of potassium,	40	"
Water,	500	grammes,

not 5 centigrammes, as has been printed (p. 33) in the second ed of my "Manuel de Matière Medicale."

This solution should be given in doses of half a tumbler full time, and vomiting should be kept up so that none of the precip shall remain behind.

This counter-poison has been used with success in cases of po ing by opium, the salts of morphia, aconite, and I have tried animals poisoned by *opium*, the salts of *morphia*, *belladonna*, *str nium*, *tobacco* and *strychnia*. It may be also used with succe poisoning by *cicuta*, *œnanthe* and other *umbelliferæ*, by *staves white hellebore*, *sabadilla*, *colchicum* and the salts of *quinine*, but of no use as an antidote to *digitalis*.

I cannot say whether it would be useful in cases of poisonin the *agaricus*.

The compound solution of iodine is always more useful as a c ter-poison for vegetable alkalies than the nut-galls or tannic acid although the latter forms an insoluble compound in almost all c it is very liable to be redissolved by an excess of acid, which is found in the stomach.

Poisoning by Opium and the Salts of Morphia.

1. The stomach must be emptied by emetics, by cathartics, and, if possible, by the stomach-pump.

2. The compound solution of iodine should then be administered.

3. The narcotic effects should be counteracted by the use of coffee in large doses. This is not an antidote, but nevertheless it is an excellent remedy to counteract the narcotic effects. The best way is to administer it without sugar, but with the addition of a small quantity of alcohol. I give it thus because I wish it to be absorbed very quickly, and it is known that sugar retards absorption in the stomach. All our experiments on the digestion of sugar go to prove this fact; alcohol in small quantity favours absorption. The following is the recipe I make use of.

Coffee, roasted and ground, 50 grammes; from which we obtain by lixiviation, 500 grammes of the fluid extract; to this add 20 grammes of brandy, one-fourth of which is to be taken at intervals of five minutes. Coffee may also be administered by injection.

Poisoning by Belladonna, Stramonium, Tobacco, and other Acro-Narcotics.

1. Evacuate thoroughly the digestive organs.

2. Administer the compound solution of iodine, keeping up at the same time the vomiting.

3. Bleeding, and if reaction is pretty great, cooling drinks, baths, &c.

Poisoning by Nux Vomica, St. Ignatius' Bean, Strychnia, Brucia and other products or compounds of Strychnia.

Strychnia and its compounds does not give the least offence to the stomach, and it is for this reason that carnivorous animals, such as lions, wolves and dogs, whose stomachs are so sensitive that they reject all other poisons, may be readily destroyed by this substance.

1. It is best, therefore, to bring on full emesis as soon as possible; strong salt water or tartar emetic, are the agents to be employed in preference.

2. The compound solution of iodine should be given at the same time.

It is necessary to give an excess of the antidote, for I have proved that the resulting compound, although wholly insoluble in acidulated water, could still poison. It is true it requires a larger dose and a longer time for the poisoning to take place, but still it is best to give plentifully of the antidote and keep up free emesis.

3. We have as yet no good clinical reports on the means necessary to counteract the tetanic convulsions caused by the absorption of strychnia; there are, however, some general principles that may be followed without danger.

Death in these cases always results from asphyxia, because the respiratory muscles, whose constant action is so indispensable to life, become so rigid that they lose their functions. In this respect strych-

nia differs essentially from other poisons, the preparations of merc for instance; the latter destroy vitality, while the former increase a high degree the action of the involuntary muscles, which is cause of the asphyxia. If the respiration could be continually k up until the paroxysms had passed off, all danger, all disease wo disappear, unless it be a lassitude following the intense excitem This is not the case with other poisons; convalesence in those ca is slow, difficult and often doubtful, for they attack the vital orga

In poisoning by strychnia, then, respiration must be kept up every means, by inspirations of air or of oxygen, by alternate pres on the thorax, &c.

Opium, the most prompt and sure agent to counteract the tet effects of the strychnia, should be given either by the mouth or rectum as circumstances may indicate. I would administer with hesitation from thirty to forty drops of Sydenham's laudanum in grammes of water and watch the effects.

I stop here, and will complete this subject I hope at some fu period, when I will review the more important points.

Means of Recognising the Presence of Morphia in Cases of Poi ing by that Substance.—This method is detailed in the Gazette M cale, as proposed by M. Mermu. The solid matters ejected f the stomach are first to be washed with water, slightly acidulated acetic acid. The product of the several washings is to be m with any liquids which can be collected. If one has liquids onl his disposal, those are to be mixed with the water, acidulated as ab In either case, the resulting mixture is then to be evaporated to ness, and treated with boiling alcohol, to separate the animal mat To the alcoholic liquid, previously filtered, some tincture of gall- is to be added—the tincture being made of 125 parts of alcohol 250 parts of coarsely powdered gall-nuts; and the whole to b digest fifteen days, which will precipitate the little animal matter solved by the alcohol, and the combination of tannin and mor thence resulting will remain in solution.

The liquid is next to be filtered, mixed with a small quanti distilled water, and then a solution of gelatine to be added in ex in order to decompose the tannate of morphia. The morphia ha gone over to the gelatine, the tannin with which it was previous combination becomes dissolved by the spirit. To separate the cipitate of tannin and of gelatine, it is necessary again to filter; when the alcohol is evaporated, the morphia will be left, which be recognized by its particular tests.—*London Lancet.*

Hydatids of the Lower Lip.—Dr. Heller, of Stuttgard, has five cases in which acephalo-cysts were developed in the lower and always on its inside. The causes of this affection are unkn in two cases it was attributed by their patients to their having b the lip. It appears first as a small and hard lump, which rapidl creases, so that in one month it may attain the size of a cherr

gives rise to pain, deformity, and difficulty in moving the lip. The hydatids are seated immediately beneath the mucous membrane, and are transparent. The largest Dr. Heller has seen was of the size of a nut. If one succeeds in removing them without opening their cavity, they are found to be made up of a round vesicle, full of fluid, transparent as water, and with a diaphanous and tender wall. The only means of curing this affection consists in the extirpation of the cyst, and this must be total, otherwise it will reappear; hence, as a precautionary measure, nitrate of silver may be applied after the removal of the tumour.—*Ibid.*

Simple Treatment of Prolapsus Ani. By Dr. Hake.—Take a piece of sponge four or five inches long, an inch and a half wide, and half an inch thick—the more elastic a bit you can find the better; roll this, in a damp but not wet state, pretty tightly, so that the roll, if relaxed, would be ready to spring back into its full length, and it will then make a roll of some little substance, round, but still soft; and its length, when thus rolled, will of course be an inch and a half. Apply it then lengthwise to the anus, so that it may be pressed, about the centre of it, quite home and firmly to that part. Taking care that it may remain so, stretch a length of adhesive plaster, about fourteen inches long, and three and a half wide, more or less, straight across the nates, rather low down, and contrive so that while the plaster adheres on one side, you press the other side closer to its opposite before you fix the length finally where it is to remain. Then sit down, at first gently upon it, and it will become very firm and fast as long as the plaster is good. I need not say that these two pressures constantly going on do the work capitally, and without any inconvenience worth speaking of—I mean, the two pressures of the roll of sponge always striving to unwrap itself, and the cross-band of adhesive plaster always keeping it from doing so by holding the nates sufficiently close together to hinder it. The working is really perfect when a little use and management has got a person into the way of it. But to facilitate matters, I will set down a few observations, at the risk of being tedious and more particular than I need be.

I never put this on until that time of day when I am going to be standing about, or to take exercise, whether walking, riding, or driving; but it should be put on then for all of these. In the evening, I take off the plaster, but leave the sponge in its place, where it has got by that time so firmly fixed by gradual spreading and swelling, that there is no danger that anything short of a great exertion will loosen it, and it is of course more comfortable to do without the plaster when it is not wanted. The sponge should be washed in cold water every time it is taken off, and in cold weather the plaster should just cross the fire before it is put on; in moderately warm weather it will adhere of itself, especially if it is sat upon for half a minute. The same plaster is better the second day than even the first, and will do very well the third day—this where economy is an object.

nia differs essentially from other poisons, the prepara
for instance; the latter destroy vitality, while the fo
a high degree the action of the involuntary mu
cause of the asphyxia. If the respiration could
up until the paroxysms had passed off, all dan
disappear, unless it be a lassitude following
This is not the case with other poisons; con
is slow, difficult and often doubtful, for the

In poisoning by strychnia, then, respi
every means, by inspirations of air or o
on the thorax, &c.

Opium, the most prompt and sure
effects of the strychnia, should be
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THOMAS B
boy, fifteen yea
appearances of cy
ne was thrown from a ca
of the countenance became mu
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His last illness was of eight days' duratio
rheumatic symptoms, followed by difficulty
in the chest. When admitted into the Royal F
exhibited very marked cyanosis, and a loud murmur,
the impulse of the heart, was audible in the præcord
the sternum. At the situation of the base of the heart
masked all other sounds; but toward the apex, and
and right side of the sternum, it was followed by a loud seco
He died a few hours after his admission. On examinatio
aorta was found to arise in part from the right ventricle, and
and trunk of the pulmonary artery were of very small siz
The right ventricle was also separated by a supernumerary septu
into two cavities, one being the infundibular portion, giving origi
as usual, to the pulmonary artery; the other consisting of the sin
of the ventricle, communicating with the aorta. The abnormal se
tum was incomplete over a space about equal in size to that by whi
the aorta communicated with the right ventricle. The orifice of t
pulmonary artery was provided with only two valves, and these we
so thick and rigid as to occasion a further contraction of the apertur
The trunk of the vessel was entirely obstructed by partially decolo
ized coagula, which were laminated and adherent to the thickene
and diseased valves and coats of the vessels. The author remarke

that the case was closely allied to the ordinary form of malformation in which, with congenital contraction of the pulmonary artery, the septum of the ventricles is defective at the base, so as to allow the aorta to receive its supply of blood from both ventricles. Its great interest, however, lay in the division of the right ventricle into two cavities communicating with the aorta and pulmonary artery respectively, and the free admixture of the venous and arterial currents of blood, which must consequently have taken place throughout the whole of the boy's life. So far, however, from this having been productive of marked cyanosis, it was stated that there was but little peculiarity in the boy's appearance till the supervention of secondary disease in the pulmonary artery after the fall, twelve months before his death. The cause of death was also, it was remarked, unusual. Though obstructions in the terminal branches of the pulmonary artery had been shown by Baron and Paget to be of frequent occurrence, the writer was not aware of any other case in which the trunk of that vessel had become obstructed.—*Lancet.*

On Porous Rarefaction of the Bone, consequent upon gout. By Alexander Ure, Esq., Fellow of the Royal College of Surgeons, and Surgeon to the Westminster General Dispensary.—The author observed that, upon making a transverse section of a digital phalanx, taken from a gouty subject, a peculiar speckled appearance was perceptible. The medullary canals were seen preternaturally enlarged, and filled with a cretaceous matter, which effervesced with acids. The Haversian canals were, in like manner, irregularly enlarged and choked up with this substance. The osseous lacunæ or corpuscles were, in some places, increased in size, and rounder than ordinary, but, for the most part, less distinctly marked. The canaliculi, more especially in the vicinity of the medullary canals, were replete with the above deposit, thicker than normal, and in obvious communication with the medullary canals. There was thus induced porous rarefaction of the bone. The author stated that the matter in question consisted chiefly of carbonate of lime, while a portion of tophus, detached from the adjunct phalangar joint, was almost wholly composed of urate of soda. In reference to the above peculiar condition of the osseous structure, he remarked, that Dr. Gerlach, of Mayence, whose co-operation he had in the above research, subsequently ascertained that precisely the same appearances were present in the section of bone taken from a person whohad been afflicted with morbus coxæ senilis. Arthritic osteoporosis is an affection of a very insidious character. It commences almost imperceptibly, creeps on stealthily, year by year, and is accompanied by occasional pain and swelling Although usually occurring in individuals hereditarily predisposed to gout, it is not necessarily preceded by a fit of that malady. While the author believes it to be but little amenable to treatment, he is of opinion its progress may be somewhat retarded by judicious hygienic measures; and the attendant pain and uneasiness relieved by topical steam baths, in conjunction with the vapour of mineral naphtha, and by various other soothing means.—*Ib.*

Alleged Presence of the Plague in the Metropolis.—Dr. Twe
has addressed a letter to the Times, in reference to the prevalen
typhus fever under a severe form in the metropolis. After sta
that the admissions to the Fever Hospital during the present year
been but little above the average of the last five years, he says:—
regard to the character of the cases received since January last,
important to observe, that a very large majority have not been
of typhus fever, but of inflammation of internal organs, more espec
of the lungs, which every medical practitioner knows to be invari
accompanied with more or less feverish disturbance of the sys
Indeed, for some time past, the proportion of cases of genuine ty
fever has been unusually small, much smaller than, from the
scarcity of provisions, and consequently inadequate supply of
could have been anticipated.

"London, therefore, affords at this time a striking contrast to m
of the large provincial towns, in which typhus fever, from ca
which it is unnecessary to advert to at present, prevails to such
alarming extent.

"And lastly, with respect to the tendency to inflammation of
glands of the face and neck—the circumstance on which the appa
connexion with plague is founded—it may be remarked, that
symptom is occasionally observed in very mild cases of fever, but
it has not been a very frequent occurrence lately, is evident from
fact that it has been observed in only five of 452 cases received
the Fever Hospital since January last; and that of these five only
have died, the fatal event in one being the result, not of the gland
inflammation, but of old standing diseases of the chest.

"From these facts I think it may be deduced,—1st. That ty
fever is not at the present time alarmingly prevalent in London;
that in its character it bears no analogy to the plague; and 3d,
the inhabitants of London have great cause of thankfulness that a
the metropolis has been visited with a much less proportionate am
of epidemic fever than any other city in the kingdom."

The mortality from typhus fever is at present much above
average! the deaths last week were 52 to a spring average of 3
London Medical Gazette.

Production of Albuminous Urine by Cantharides.—In a comm
cation on Cystitis from cantharides, made by M. Lavalleé to
Academy of Medicine, at its sitting on the 15th inst., it is stated b
author that under the use of this vesicatory, at whatever part o
body it may be applied, and however distant from the hypoga
region, albumen is liable to show itself in the urinary apparatus
der three forms: 1, in solution: 2, as a deposite in the urine:
3, as a false membrane produced in the bladder. The albume
contained in the urine under these circumstances in much gr
proportion than in Bright's disease:—the author states that in
instances, after a day's rest, the deposite constitutes more than
the height of the liquid. As an exception, the urine may conta

traces: but then vesical symptoms, such as pain and tenesmus, are absent. This is a new form of artificial albuminuria."—*Ibid, from L'Union Médicale.*

The Gastric Juice.—Lehmann has confirmed the statements of Pelouze and of Bernard and Barreswill, regarding the absence of free hydrochloric acid in the gastric juice, and has further indisputably proved the existence of free lactic acid in that secretion. To prevent any fallacy in the experiments, dogs were kept fasting for 12 or 16 hours, and then fed about a quarter of an hour before death with bones freed as much as possible from skin and fat. The gastric juice was almost perfectly clear, being scarcely opalescent. From 100 parts there were obtained 1·808 of solid matter, 0·25 of hydrochloric acid, and 98·097 of water. This hydrochloric acid is formed by the decomposing action of the lactic acid at a certain degree of concentration, even in the cold, upon certain chlorides, especially those of calcium and magnesium, but not those of potassium and sodium. To prove the presence of lactic acid itself with certainty, the gastric juice was concentrated *in vacuo* to one twelfth of its volume, the residue mixed with alcohol of 0·85, the spirituous solutions from several stomachs evaporated to the consistence of a syrup, and the residue exhausted with absolute alcohol. The residue of this was exhausted with ether, and the ethereal extract mixed with water, to remove the fat, and filtered. On further concentration, more drops of oil separated from the filtrate, and the fluid still contained hydrochlorate of ammonia.

The liquid was partly saturated with lime, partly with magnesia, and the salts formed were purified by several recrystallizations from alcohol and water. The magnesian salt gave results approximating very closely to the formula Mg O, La+3 HO."—*Ibid, from Dr. Day's Report on Chemistry.*

Turning a Substitute for Craniotomy.—Dr. Simpson states that he has practised turning as an alternative for craniotomy and the long forceps, in several cases in which the head had been morbidly detained at the brim of the pelvis, from the slighter forms of disproportion between the two; and he believes it to present various advantages over embryulcio. It gives the child a chance of life; it is more safe to the mother, because it can be performed earlier in the labour, and more speedily; it enables us to adjust and extract the head of the child through the imperfect pelvic brim in the most advantageous form and direction, the head flattening *laterally* under the traction; the neck of the child (if it were living, or only lately dead,) is so strong as to allow us to exert such a degree of traction upon the obstructed head, that the sides of the cranium might become very greatly compressed, or even indented under it, and that without necessarily destroying the child; and, lastly, he observes, it is a practice which can be followed when proper instruments are not at hand, and the avoidance of instruments is generally desirable when it is possible.—*Prov. Med. and Surg. Journ. from Monthly Journ. of Med. Science.*

Syrup of Hydrocyanic Acid.—At the request of several medical practitioners a very elegant syrup of prussic acid has been devised by Dr. Reich, affording an eligible means of administering that potent substance in a certain dose. He prepares it by adding to a syrup of sweet almonds a definite quantity of amygdaline. His recipe is as follows:—Take of sweet almonds two ounces; immerse them for the space of a night in cold distilled water, and in the morning remove the skin by the pressure of the finger and thumb; then pound the almonds in a deep mortar, adding two ounces of the purest sugar. Pound together in a mortar, either of porcelain or marble; then by degrees add distilled water two ounces, and strain, with the application of slight force. To this emulsion add sugar of the purest kind two ounces, and promote the solution of the sugar by mixture alone, heat being avoided. To four ounces of this syrup add seventeen grains of amygdaline, and rub together in a porcelain mortar. Much of the syrup need not be kept ready prepared, as its extemporaneous formation is so easy. An ounce contains a quarter of a grain of real prussic acid.—*Ibid. from Buch. Rep.*

Benzoate of Ammonia in Gout.—Dr. Seymour states that he has frequently used this medicine in cases in which the small joints were red and swollen, or where fluid was deposited in the joint of the great toe, and also in cases where the lithate of soda existed in the joints of the fingers, and that it was decidedly useful. He thinks that early depositions have been arrested, and large depositions diminished, under the use of this medicine. He regards it as a good diuretic, and as especially adapted to those cases of dropsy in which an irritable stomach renders the employment of ordinary diuretics impracticable. He has seen also the albumen in renal dropsey diminish under the use of the benzoate of ammonia.—*Ibid, from Thoughts on Several Severe Diseases, &c.*

Binoxide of Mercury in Skin Diseases.—M. Ibreisle has reported the results of his experience in the use of the binoxide of mercury as a local application, in diseases of the skin, especially those of a strumous or syphilitic origin. Indolent ulcers of the extremities have frequently yielded to this application, as have also phagedenic ulcerations. The author regards this preparation as an excellent remedy for the removal of the indurations which accompany syphilitic ulcers; he has likewise used it with success in pustular syphilides.

The formula is that of an ointment, consisting of one part of the oxide, to four or five of lead. Some caution appears to be necessary in its employment.—*Ibid, from Gazette Médicale.*

Relative Value of Different Medicines Ordinarily Empolyed in Syphilis.—A long memoir on this subject by MM. Boys de Loury and Costilhes closes with the following propositions:

1. The preparations of gold and silver are worthless in constitutional syphilis.

2. The iodide of potassium has no influence upon the progress and duration of chancre, particularly the indurated variety: but in such cases mercury is to be preferred. The same may be said as respects buboes, mucous tubercles, papular and pustular syphilides.

On the other hand, iodide of potassium is invaluable in syphilitic disease of bones, and in syphilitic tubercles of the skin with or without ulceration. It may be stated in general terms that the iodide is successful in proportion to the anterior duration of the disease, and the degeneration of the constitutional powers.

Iodide of potassium acts like a charm in nocturnal pains. United with the bin-iodide of mercury, it is valuable in syphilitic cachexia, and in cases which have resisted ordinary mercurial treatment.

3. Mercurial fumigations are only available in healing local symptoms, and should not be employed as a means of affecting the system.

4. Mercurial frictions should be used only in those cases in which irritability of the mucous membranes forbids the internal administration of mercury.

5. The proto-iodide of mercury is the best medicine which can be employed as an antisyphilitic, as well in the primary as the consecutive symptoms of the disease.—*Ibid. from Gazette Médicale.*

Cod-Liver Oil.—M. Bretonneau has come to the conclusion, after many trials, that common train oil is quite as efficacious in struma and other cases in which it is given, as the cod-liver oil. This is an important fact, if true, and demonstrates that the virtues of the latter oil are to be ascribed to its fatty principles, not to the small portion of iodine contained in it.—*Ibid. from Bulletin de Thérapeutique.*

New Muscle in the Eye.—The *Oest. Med. Woch.*, No. 40, mentions that in the human eye and also in that of the mammifera, Dr. Brüche states that he has discovered a new muscle. This muscle appears in a manner to have the same power as that of the iris. It consists in the grey ring which is found in front of, and in the neighbourhood of the iris on the external surface of the choroid, and which has been usually known under the name of the ciliary circle. Brüche gives to this muscle the name of the expansor muscle of the choroid.—*Monthly Journal of Medical Science, from Gaz. Med. di Milano.*

On the Frequent Occurrence of Alkaline Urine in Health, and the Errors of Diagnosis occasioned by a Want of Knowledge of this Fact. By Dr. Adolph Krukenberg. Brunswick.—The fact—first promulgated by Wöhler—that the internal use of salts of vegetable acids and fruits containing them, causes the urine to be secreted alkaline, has been too much neglected by succeeding physiologists and pathologists. Our author found that a much smaller quantity of fruit was necessary for the production of this phenomenon than has hitherto been supposed, viz.—2 to 4 oz. of apple pulp, or 12 plums, weighing without the stones scarcely 1½ oz., sufficed to make the

urine alkaline and hazy from phosphates, or if clear on excretion, heat caused their deposition; the addition of a little hydrochloric acid caused an effervescence like champagne; too much liquid, a bladder already filled with acid urine, or a disproportionate allowance of flesh, interfered with the success of the experiment. How often are those ill of chronic complaints who use a moderate diet, and with whom fruit is a useful and favourite article, troubled with hazy and alkaline urine, causing anxiety alike to themselves and their physician, which a little physiology does away with. In the simple chronic nephritis of Rayer, the chief symptom is the alkalinity of the urine; in no case was there a sectio cadaveris; and some of the cases recovered so quickly, as to justify a doubt as to the correctness of the diagnosis; although he inculcates careful dietetic treatment, it is evident from his work that the semiotic influence of fruit in small quantities was unknown to him. This article is not forbidden at La Charité, and friends of the patients often carry them some. In several of his cases the alkalinity of the urine seemed to depend on purulent admixture, and consequent rapid putrefaction; and in one it seemed to be kept up, if not produced, by the use of an alkaline saline water (Contrexeville.) The alkalinity of the urine has also been used by Prout as a diagnostic sign of certain spinal affections. These he divides into two great classes:—1st, Those arising from depressing emotions and weakening influences; and in these he recommends the use of fruit, and fluids containing malic acid, as cider and perry; to these, and not to any disease, our author refers the alkalinity of the urine. 2d, Injuries of the spine: our author states, that neither Rayer nor himself had ever been able to observe the urine alkaline in cases of injuries of the spine unless there were some existing or consecutive affection of the mucous membrane of the urinary passages, producing purulent admixture, hastening thereby the putrefactive changes in the urine. In the three cases detailed by Prout, two had stricture of the urethra, and the third retraction of the testicle, and a mucous sediment,—all bespeaking the existence of some such affection. A microscopical examination, by showing the existence or absence of pus cells in the urine, would have confirmed the diagnosis, or at once corrected it. How far inattention to diet may have led to error, cannot be specified. Prout also mentions, without explanation, what has been already referred to,—viz. That although alkaline urine, by copious secretion, be clear and bright, yet boiling causes it to deposit a phosphatic sediment, which falls without any such previous process, if the secretion be more sparing; the phosphates separate before the boiling point, and from their great specific gravity fall rapidly, and may thereby, as well as by their solubility in acids, be distinguished from the albumen found in Bright's disease.—*Ibid, from Zeitschrift für Rationnelle Medizin.*

On the Nature of Tetanus caused by Strychnine. By Professor Hermann Meyer, Zurich.—The tetanic convulsions, which follow the exhibition of Strychnine, are well known; as also the fact that

these convulsions can be readily excited as reflex movements. The general use of strychnine in experiments on the nervous system is very much based on the knowledge of these facts, and invites to a discussion of the question as to the mode in which the tetanus originates. The following experiments were instituted for this purpose.

Exp. I. The crural nerve of a frog, suffering from convulsions induced by strychnine, was divided; these immediately ceased in the limb.

Exp. II. No convulsions took place in a limb, in which the nerve had been divided previous to the exhibition of the poison.

From these well known experiments, it follows that the originating cause of the convulsions must be sought for in the central parts of the nervous system. But the question ensues, does the tetanus originate from an affection of an individual portion of the central organ, or in an affection of every individual portion? The following experiments, also somewhat well known, tend to throw some light on the subject.

Exp. III. The brain was removed from a frog; tetanus ensued in the trunk.

Exp. IV. Brain and cerebellum removed, result as in the preceding.

Exp. V. Medulla oblongata removed; same result.

Exp. VI. Medulla oblongata divided; general tetanus ensued.

Exp. VII. The spinal marrow was removed posterior to the giving off of the nerves to the anterior extremities; result as in the preceding case.

From these experiments, it follows that the origin of the tetanus is to be sought for in some cause common to all the central organs of the nervous system, The following experiments show what this cause is.

Exp. VIII. The posterior column of the entire spinal marrow was removed from a frog by means of a fine pair of scissors. A solution of strychnine was then either exhibited by the mouth, or applied directly to the spinal cord. Convulsions occurred only in the jaws and eyes.

Exp. IX. The posterior column of that part of the cord giving off nerves to the posterior extremities was removed. Tetanus occurred only in the head and anterior extremities.

Exp. X. The same portion of cord giving off nerves to the anterior extremities was removed. Tetanus occurred only in the head and posterior extremities.

From these experiments, the author thinks himself entitled to conclude, that the presence of the motor nerves, even though uninjured, does not suffice to produce tetanus; but that there must also be an uninterrupted connexion of the sensory and motor fibres within the central part of the nervous system. The only motions, however, which we recognize as dependent on the sensory fibres, are those which we know to be the cause of reflex movements. The

above experiments, therefore, would lead to the conclusion, that tetanus caused by strychnine arises entirely from general reflex movements, and that the action of the strychnine not only excites the motor fibres, but goes to increase the necessary cause from which reflex movements arise. If this be true, tetanus must cease, even when the spinal marrow is uninjured, provided the conditions under which reflex movements arise are removed. In order to test this, the following experiments were instituted:—

Exp. XI. The skin of a frog was rubbed over with strong prussic acid (30 per cent.,) so that the superficial peripheral extremities of the nerves were paralyzed. Strychnine was exhibited; no tetanus ensued, except when the animal was strongly shaken (thrown about, for example.)

Exp. XII. After laying open the spine of a frog, the posterior nervous roots were divided. Same result as above, or as when the posterior column of the cord was irritated with a needle.

Exp. XIII. The same experiment was repeated in a frog in which tetanus was present; it ceased immediately on division of the posterior roots, and only recurred under the conditions first stated.

From these experiments, then, it may be concluded, that tetanus arising from the action of strychnine originates entirely and alone from reflex movements produced by the strychnine exciting to increased action the primary cause of the reflex motions themselves.

The next question that occurs is, what is the primary cause of these reflex movements? Here, however, we find ourselves in the field of physiological controversy; as far as regards the question first considered, it is a matter of little moment how the controversy may be decided. It may be remarked, however, that tetanus induced by strychnine cannot be attributed to a general increased excitement of the nervous system. Were this the case, stronger contractions of the muscles dependent on the anterior cord laid bare in Exp. VIII. IX. and X. should have occurred rather before the administration of the poison than after it; but this was not the case. Other experiments, which require to be repeated, however, seem to show that the cause of reflex motion is to be sought for in the grey matter of the spinal cord, that the strychnine acts, therefore, by exciting to activity this grey matter, or rather the ganglionic in masses composed of it. These experiments are the following:—

Exp. XIV. A needle was carefully passed down through the centre of the spinal marrow, of a beheaded frog, as far as the point where the nerves to the anterior extremities are given off, and then withdrawn. Strychnine was then administered. Tetanus occurred in the posterior extremities only.

Exp. XV. After laying open the spinal canal, the grey matter of the posterior half of the cord was destroyed as far as it gave off nerves to the posterior extremities. The movements of the latter

were little affected by the operation; but tetanus did not ensue after the exhibition of strychnine.—*Ibid, from Ibid.*

On the Origin of Solid Bodies in Synovial Cavities. By Dr. Bidder.—The author had charge of a case of long standing swelling of the knee joint, which finally opened, allowing a quantity of granular matter to escape. The grains composing this matter were of a uniform size,—$1\frac{1}{4}'''$ long, $\frac{3}{4}'''$ broad, $8\frac{1}{2}'''$ thick,—regular, flat-oval, clumped together in masses of variable size by a glutinous transparent fluid, present in but a very small quantity; they were highly elastic, presented no trace of a pedicle; their cut surface seemed homogeneous to the naked eye, and presented no trace of organization under the microscope; a chemical examination showed them to be composed of albumen. Mickel's opinion, so recently substantiated by Hyrtl, does not, therefore, hold good in every case; our author acknowledging its correctness in many cases, as well as the possibility of some cases arising from hydatids, (Dupuytren,) viz. those in which the bodies are possessed of a laminated structure, and have an internal cavity, notwithstanding that other distinctive marks may be lost, (vide Gluge. Anat. Mic.,) throws out another hypothesis as an explanation of their mode of origin in cases like the present, viz., that in certain cases an increased flow of blood, and consequent secretion of synovia, may force off the epithelium cells; that these subsequently increase, partly by endosmosis, partly by precipitation on their external walls; the peculiar life of the cell wall in certain cases altering the contents both with respect to colour and consistency, no membrane being perceptible under the microscope, may proceed from its stretched and thinned condition, from its being originally structureless, or from its homologation with its contents. The bodies examined by him consisted almost entirely of albumen, easily obtained from the synovia: their uniform size likewise presupposed their origin to have been from similar forms, endowed with similar capacities for life, conditions fulfilled by the epithelium cells. This theory can only hold good where the synovial cavities have an epithelial covering, which is wanting in bursæ mucosæ, and mucous sheaths of tendons.—*Ibid, from Ibid.*

Note on the Exhibition of Sulphate of Quinina. By M. Donovan, Esq., M. R. I. A.—A student in medicine, M. Desvouves, some time since published, in the *Revue Médico-Chirurgicale* of Paris, a notice on an easy and certain method of removing all the bitterness of sulphate of quinina. In 1842, being at Martinique, attacked with an obstinate intermittent fever, he took sulphate of quinina which suspended the access. This medicine which, as we know, is very disagreeable to swallow, on account of its bitterness, was presented to him one day at the moment when he was going to take a cup of coffee for his breakfast.

He mixed 20 centigrammes (3½ grains very nearly) of sulphate of quinina in a spoonful of coffee, and swallowed it, without perceiving any bitterness. The accession of the fever being interrupted, M. Desvouves discontinued the use of the medicine; but resumed it as the disease reappeared in 1843 and 1844; and he declares that, in ten trials, the bitterness of the sulphate of quinina was entirely destroyed by the coffee, and that its febrifuge agency was in no degree impaired.

Being afterwards in attendance on a child of six years of age, M. Desvouves administered 20 centigrammes of sulphate of quinina in the same manner: but the child not being accustomed to take coffee made on water, some spoonfuls of milk were added, without any complaints of the bitterness of the medicine, although it soon triumphed over the disease. In four days, 120 centigrammes (22 grs.) were taken, and the fever did not reappear. From this it might be inferred that coffee made on water, or mixed with milk, possesses the property of removing the bitterness of sulphate of quinina, without injuring its febrifuge properties.—(*Jour. de Médecine de Mai*, 1847, *p.* 204.)

Supposing for the present that all these are well-observed facts, it might be conceived that the tannic acid present in the liquid coffee would decompose the sulphate of quinina, forming tannate of quinina, which, being an insoluble salt, would have less taste than if it were in solution; but in this respect it would have no advantage over the sulphate itself.

Decoction of coffee contains tannic acid. If sulphate of quinina be mixed with cold decoction of coffee, no change takes place; the sulphate remains undissolved. But if the decoction be very hot, the sulphate dissolves and is decomposed; the tannate of quinina partly precipitates on cooling, and partly remains suspended, forming a muddy liquid.

If to some cold decoction of coffee, a little sulphate of quinina and a few drops of dilute sulphuric acid be added, solution takes place; but that the sulphate has been decomposed will appear by the deposition of copious clouds of tannate of quinina which soon make their appearance.

Such are the facts concerned; but none of them are of any avail, either in explaining or supporting the statement of M. Desvouves. I mixed cold decoction of coffee with sulphate of quinina, and swallowed it; the taste was intensely bitter. I dissolved some sulphate of quinina in very hot decoction of coffee; the taste of this was equally bitter. I promoted the solution of the sulphate in cold decoction of coffee by means of two drops of dilute sulphuric acid; but the taste was as bitter as ever. This being my result, I forbear to theorise on the alleged destruction of the bitterness. The decoction which I used was of the usual strength made for the table. If intensely strong coffee disguise the taste of the sulphate, it must be by decomposing it, and forming the insoluble tannate.

It may be proper to observe, that there is no occasion to seek new means of disguising the bitterness of sulphate, or as it is more properly named, disulphate of quinina, at least for the use of those who can swallow a pill. For patients who cannot take it in the state of solution, which is undoubtedly the best, the form of pill is convenient. It is true there is an objection to this form, on account of the insolubility of the salt, but it is easily removed by the employment of the *neutral sulphate* of quinina, a crystallizable salt, which easily dissolves in water without any addition of acid. The neutral sulphate is in fact the preparation that should have been originally introduced into medicine, instead of the insoluble disulphate, which sometimes causes much inconvenience. The dose of both salts is much about the same; the neutral sulphate may be given with propriety in a somewhat larger quantity if the prescriber wishes to be critical.

A convenient formula would be the following: the sulphate of quinina, for the sake of clear distinction, should be marked *neutral.*

R. Sulphatis quininæ neutralis grana duodecim.
Pulveris glycyrrhizæ subtilissimi grana octodecim.
Theriacæ q. s. M. fiat massa quam divide in pilulas duodecim.

As many of these pills may be directed to be taken as the prescriber wishes: they will remain soft, and hence will have no chance of passing through the intestinal canal undissolved. No astringent substance should be contained in the pill: hence the mass must not be formed with conserve of roses. The pills may be silvered to disguise the little bitterness which otherwise they would have had.

According to M Pierquin, thirty-two grains of carbonate of magnesia conceal the taste of six grains of disulphate of quinina, without interfering with its virtues. It is also affirmed that anise or fennel perfectly masks the bitterness of this powerful febrifuge.—*Dublin Medical Press.*

Observations on the coexistence of Variola and Scarlatina, with remarks on the coexistence of other eruptive fevers. By J. F. Marson, Surgeon to the Small-Pox and Vaccination Hospital, London.—During the last eleven years, the author of this paper has seen, at the Small-Pox and Vaccination Hospital, seven persons who had variola and scarlatina simultaneously. These patients were apparently suffering from small-pox only on their admission, but in the course of a few days scarlet fever also developed itself. In each case, all the leading symptoms of scarlatina were well marked, and the eruption was evidently different from the roseola which frequently precedes the eruption of small-pox, and also different from the erythema, (somewhat resembling it,) arising from the miasm of hospitals; in fact, it was the florid red eruption peculiar to scarlatina, which no other eruption

exactly resembles. Three of the patients were unprotected, and four of them had been vaccinated. All recovered but one, the particulars of whose case were given in full. Three other patients with variola and scarlatina existing at the same time, have been seen, within the last few years, at the London Fever Hospital. Reference was made to the opinion so strongly expressed by Mr. Hunter, that no two fevers could be coexistent. Several cases were then alluded to, that have been published by different observers, in France and England, of the coexistence of variola and scarlatina, variola and rubeola, variola and pertussis, variola and vaccinia; rubeola and scarlatina, rubeola and vaccinia, rubeola and pertussis; varicella and vaccinia, pertussis and vaccinia. The individuality of erysipelas, as a special eruptive fever, was commented on, this disease being shown to arise, almost invariably in hospitals, from the impure air produced by morbid animal effluvia. The French were acquainted with the fact, fifty years ago, of small-pox and scarlatina existing together occasionally, some cases being referred to by the author, published by M. G. Vieusseux, at that period, but the subject has nearly escaped attention, or at least remark, by writers of this country.—*Dub. Med. Press.*

Sir Astley Cooper was kind enough to make us acquainted with his researches on the structure and functions of the thymus gland, with which he was then occupied; and I am the more pleased to recall this circumstance, because it enables me to record a reply of Sir Astley's, which proves delightfully the perfect truth and honesty with which he conducts his researches and experiments. While he was pointing out to us, on a most delicate preparation, the two membranes which he has found in what he calls the reservoirs of the thymus, I said to him, "You said, and it is." "No," he replied, "It is, and I said." The scientific character of the great English surgeon breathes in this response.—*Prov. Med. and Surg. Journ. from Six mois de Sejour en Angleterre par S. Pironde, D. M.—British and Foreign Medical Review*, vol. 8, p. 534.

When Dr. Dimsdale inoculated Catherine the Second for the small-pox, that Princess (who, whatever might have been the vices of her moral character, possessed a very large and magnanimous mind,) took precautions for securing her personal safety in case of her death. Finding herself much indisposed on a particular day, she sent for Dimsdale, whom she had already remunerated in a manner becoming so great a sovereign. "I experience," said she, "certain sensations which render me apprehensive for my life. My subjects would, I fear, hold you accountable for any accident that might befall me. I have therefore stationed a yacht in the Gulf of Finland, on board of which you will embark, as soon as I am no more, and whose commander, in consequence of my orders, will convey you out of all danger." This anecdote, so honourable to the Empress, I heard from one of Dimsdale's sons, above forty years ago.—*Ibid, from Sir N. W. Wraxall's Posthumous Memoirs of his own Times*, vol. 3, p. 199.

THE

MEDICAL EXAMINER,

AND

RECORD OF MEDICAL SCIENCE.

NEW SERIES.—No. XXXIV.—OCTOBER, 1847.

ORIGINAL COMMUNICATIONS.

A Case of Retention of a Dead Ovum in Utero for six months, without Putrefaction. By George L. Upshur, M. D.

Mrs. ——, æt. 38, the mother of six children, menstruated the first week in November, 1846. She supposes herself to have conceived immediately afterwards. About the middle of the following January, while walking in the street, she felt suddenly, without pain or other premonition, a fluid discharge from the vagina, which, upon hastening home, she discovered was blood. Fourteen days after this, the breasts became flaccid, and the morning sickness, which had been gradually lessening, entirely ceased.

On the 30th of July, about 10 o'clock at night, she was seized with pains like those of labour, which steadily increased in force and frequency until early next morning, when there was expelled a dead fœtus, three inches long, with the membranes and placenta attached by a cord six inches in length. During the whole time, from the first hemorrhage to the expulsion of the ovum, a period of six and a half months, there was more or less sanguineous discharge from the vagina. This discharge was as free from unpleasant odour as the catamenial fluid usually is, except during three days in the month of April, when it was slightly putrid in its character. She consulted no physician about the matter, as the flow was unaccompanied by pain, and never

so profuse as to affect her health seriously, or to prevent her from attending to the ordinary duties of the household.

The correctness of this statement may be implicitly relied on. The lady in question is sensible and intelligent, and noted for the particularity with which she marks the various events connected with her pregnancies. After the morning sickness ceased, and the breasts became flaccid, she believed she had aborted and so she expressed herself to her friends, pointing to those symptoms as evidences of the fact.

I had an opportunity of carefully examining the ovum two hours after its expulsion. There was not the slightest sign of putridity about it, the odour resembling very closely that of fresh beef. The placenta was hypertrophied, three and a half inches in diameter and an inch and a half thick, lobulated, very firm under pressure, and nearly exsanguine.

The cord was not uniform in size, nor invested by the membranes, of which a small proportion only were attached to the placenta. The vessels of the cord seem to have coalesced into one, and were impervious. The fœtus was of a variegated mahogany colour, preternaturally firm to the touch, with features just distinguishable. The fingers and toes were scarcely sufficiently developed to be counted, and there was no ossific deposit in any portion of the body. I have the entire ovum as it was expelled, preserved in alcohol.

It is a universally admitted law in obstetrics, that as soon as the ovum dies, it is thrown off from the uterus as a foreign body; or, if it remain any length of time in that organ, it begins to decompose, and is eliminated in a putrid discharge from the vagina. And it seems, indeed, difficult to imagine, how a dead body can be long exposed to the combined action of heat, air, and moisture, without undergoing the putrefactive process.

In the September number of the *Medico Chir. Rev.* for 1823, p. 308, there is an article entitled "Cas Rares," extracted from the *Dict. des Sci. Med.*, by M. Fournier, in which three cases are given of retention of the fœtus for a very long time after its death. The first is cited from Albosius, where the fœtus was retained *twenty-eight* years, and was petrified. In the second, it was retained in utero *thirty-one* years. The woman died of peripneumonia, and, upon examination of the body, the fœtus was found enveloped in chorion and amnion, which were ossified, as well as the placenta. There was no sign of putrefaction about it, nor did it exhale any unpleasant smell. It was about the size of a nine months' child. In the third case, a fœtus was found in the uterus of a woman who had been pregnant *twenty-three* years. It had neither umbilical cord, placenta, nor membranes, and was almost entirely petrified.

These cases seem to be well authenticated, being recommended as both curious and useful, by Dr. Johnson, the then editor of the *Med. Chir. Rev.* I leave these anomalies to be accounted for by older and more experienced heads than mine.

Norfolk, Va., September 7th, 1847.

On the Inhalation of Ether in Labour. By Jonathan Clark, M. D., of Lower Merion, near Philadelphia.

To the Editor of the Medical Examiner.

Dear Sir,—I send you an account of some obstetric cases, in which the inhalation of Ether was used with not unpleasant results.

Case 1.—July 19th, at 10 o'clock, P. M., I saw Mrs. ——, aged 18, in labour with her first child. An examination shewed the head to be presenting, with the vertex to the left sacro-iliac junction, membranes entire, and the os uteri dilated to the extent of two inches.

She had been in labour since 5 o'clock; the pains had not been very severe, but were increasing in force and frequency, occuring at intervals of three minutes, the os uteri being moderately rigid, and external parts quite so.

The progress of labour was scarcely perceptible, and there appeared to be an unusual want of fortitude and power of control over her feelings, on the part of my patient. As there appeared to be nothing to contraindicate it, I resolved to use the ether. In two minutes from the commencement of the inhalation, she pushed away the sponge and exclaimed, I am losing my senses. On being assured that it would relieve her pain and do her no injury, she renewed the inhalation, and was fully under its influence in five minutes. From the time I first saw her, her pulse had been 80, but upon the application of the ether it fell to 75, and continued at that rate during the labour.

She appeared to be almost unconscious of pain, judging from her actions, but the expulsive efforts of the uterus were not quite so frequent as at first, but more efficient. She said but little except to ask for more, when the ether had evaporated from the sponge. On one occasion she exclaimed, "more, more, I am suffering dreadfully." This was during a pain. She would hold the sponge wet with the ether, to her mouth and nostrils, and inhale with eagerness, till her power of supporting it was lost, when her hand would fall, and with it the sponge, in this way guarding effectually against an over-dose. After remaining quiet a few minutes, she would upon the recurrence of the pain, apply the sponge and inhale again as eagerly as before.

In one hour and forty minutes from the first use of the ether, she gave birth to a male child, quite vigorous and noisy. I then took away the sponge before making an effort to remove the placenta, which came away in a few minutes, the uterus contracting promptly. For ten minutes she continued to insist upon having more of the ether, and not till she had recovered her senses fully, did she seem willing to give it up. It was fully ten minutes after the birth of the child, when she inquired whether it was born, having no recollection of any thing that had occured since inhaling the vapour.

Convalescence was rapid, without any unpleasant symptom, both mother and child doing well.

Case 2d. July 31st, I was called to see Mrs. O., of Blockley, aged 28 years, in labour with her third child. At 11, P. M., when I saw her, she had been in pain for several hours. The pains were not frequent nor of much force. On examination, I found the head presenting, with the vertex to the left acetabulum, the os uteri dilated to the extent of about three inches, and the membranes entire. I then left her for two hours; and when I returned, the pains had increased in force and frequency; the membranes had been ruptured, though the labour had made little progress.

Although the case was not such as I should have preferred for the use of the ether, I decided on using it. Her general health had been very poor, her digestion much impaired, and a variety of nervous symptoms also rendered her quite miserable.

After inhaling the vapour for a few seconds, the usual cough troubled her somewhat. This however soon subsided, and in seven minutes she dropped the sponge, being entirely under its influence. The pains were increasing in force, and partly roused her from her lethargy, when she would reapply the sponge and again obtain relief. At a quarter of 3, A. M., she gave birth to a very large male child without any consciousness of suffering. The placenta came away almost immediately, no flooding followed, nor any other unpleasant symptom, except a sense of uneasiness in the head, and lightness on raising it. The mother and child have done and are doing well.

Case 3. August 3d, at 4 o'clock, P. M., I saw Mrs. D. of Blockley, aged 28, in labour with her fifth child. She had been in labour two hours when I saw her. The pains were quite severe, and the labour had made considerable progress. The os uteri was well dilated, the membranes had ruptured, and the head was presenting with the vertex to the left acetabulum.

As she was suffering very much from the violence of the pains, I thought proper to relieve her by using the ether.

She made no objection to its use, and in three minutes from the time of commencing the inhalation, was fully under its influence. Her pulse was 88, when she commenced inhaling, and it fell to 70. It afterward rose to 78.

She seemed to be conscious of her relief from pain, which was evinced by the eagerness with which she seized the sponge, and inhaled again, when the effects of a former inhalation had partially passed away.

In forty-five minutes after first inhaling the ether, she was delivered of a female child of average size, and quite vigorous. The placenta came away in a few minutes; but not till the effects of the ether had passed off. She complained somewhat when it came away, being conscious of pain at the time; but of all that had occurred, and of all her pains, or more properly speaking, of all the expulsive efforts of the uterus, from the time she first inhaled the vapour till after the child was born, she had no recollection whatever. Nothing unpleasant occurred during convalescence.

Case 4th. Mrs. N., of Blockley, aged 26, was taken unwell on the afternoon of Saturday, the 14th September. She complained of great weakness, vertigo, sickness of stomach, and pains in the back and limbs. The bowels were disturbed several times during the afternoon and evening; the evacuations were black and very fetid The matter ejected from the stomach, as she vomited repeatedly, was also of a bilious character. Her constitution had been very much impaired three years since, by an attack of autumnal fever, from the effects of which she has not yet recovered.

During this her first pregnancy, she has suffered much from indigestion, a train of nervous symptoms of a distressing character, together with general *œdema*.

At 8 o'clock in the morning, after a restless night, of which she has no recollection, she was seized with convulsions, which continued to recur ;—the interval between the convulsions decreasing, while the violence and duration of the paroxysms increased. At 10 o'clock, when I saw her, she had had six convulsions.

Her perceptive faculties were altogether obliterated. As each paroxysm subsided, she was observed to recover her faculties less perfectly, till they were wholly lost, with the exception, perhaps, of the ability to feel pain, which appeared to be regained simultaneously with the power of the uterus to contract; a slight contraction of which served only to usher in another paroxysm. An examination showed that but little progress had been made in the labour; the os uteri was dilated to the extent of an inch and

a half, the membranes were entire, and the head was presenting. Her pulse was one hundred and ten in the minute. As she had complained of head ache before the convulsions came on, and as the pulse appeared of a character to bear it, I took sixteen ounces of blood from the arm.

This had no favourable effect. On the contrary, the spasms continued to increase in force and frequency. The pulse rose to one hundred and thirty-five in a minute, becoming much weaker. The extremities became cold, notwithstanding the application of sinapisms, and the surface was generally cold and clammy, and of a livid hue. Under these circumstances, it occurred to me that the vapour of ether might act as a stimulant, and also change the disordered action then existing. By administering the vapour, a worse state of things could not be induced than already existed, for it was evident to me, from the untoward progress the case had made, that a few more convulsions would destroy her.

All hope of a favourable result was lost, inasmuch as the labour made no perceptible progress. The lethargy succeeding a paroxysm of convulsions was accompanied by a want of contractile power in the uterus, and as soon as this was in a measure regained, and the uterus began to contract, another paroxysm would occur, preventing the further progress of the labour.

Under these circumstances I thought that if I could substitute the lethargy from the inhalation of ether, for the existing one, there would be a great point gained; *the one putting an entire stop to the labour, the other having no such effect.*

During the interval between each paroxysm, I had examined the state of the os uteri, hoping to find it dilated sufficiently to enable me to introduce my hand for the purpose of turning, but this was not the case, as there was very little dilatation. In a few minutes after the ninth paroxysm had passed off, I applied a sponge, well moistened with ether, over the mouth and nostrils The patient soon began to rub her nose violently, pushing away the sponge as soon as it was reapplied, till she was prevented by holding her hands. Her countenance in a minute or two lost its deathly hue, and resumed a more natural appearance. In less than ten minutes the whole surface became warm, and much more natural.

The pulse fell to one hundred and twenty-five; the interval between the paroxysms increased more than one-half, and their duration, when they did recur, was much lessened. Uterine contractions now ceased to have their former effect of bringing on the convulsions, *so that I could observe several distinct and efficient pains or contractions between the paroxysms.* The os uteri, as a consequence, began to dilate, but not as yet sufficiently to admit of the introduction of the hand.

I did not venture to apply the sponge long enough to produce a complete lethargy, but removed it when her opposition to its application in a measure ceased. I was fearful, if a complete state of lethargy was induced in her then low condition, she might not react. After being three hours and a half under the influence of the ether, the uterus was sufficiently dilatable to admit of the gradual introduction of the hand, the membranes which were still entire, were ruptured, and I succeeded in obtaining one foot, which was brought down and secured with a tape. Owing to the ungovernable restlessness of my patient, and to the powerful contractions of the uterus, I had great difficulty in finding the other; and when I had succeeded in getting it partly down, it offered so much resistance to my efforts, that I was apprehensive it might not be a fellow to the one I had. After comparing the direction of the toes, I ventured to exert a little more force, and brought away the child.

It was still living, though much exhausted, the lungs required inflation before it breathed, but after respiration was once established it did very well. The placenta came away promptly, and there was no flooding.

No vapour was given after the child was delivered. The mother still continued in a stupor, with convulsions at intervals of forty-five minutes, till 4 o'clock next morning, when they ceased. She took, during the night, as an antispasmodic, forty drops of tr. assafœtida in milk, at intervals of two hours. In the evening her pulse was one hundred and twenty-eight, and quite feeble. I should mention that the convulsions had diminished in force, and continued to do so till they ceased.

At eight in the morning, the stupor still continuing, she took ten grains of calomel, and in one hour a tea-spoonful of fluid ext. of senna, which was repeated every hour for four hours, when it operated on the bowels, producing copious black and very fetid evacuations. From this time she recovered rapidly: the day following she noticed some things and answered questions. Her tongue had been sadly bitten; she could not account for its soreness; has no recollection of any thing that has occurred, and thinks it strange that her child could have been born without her knowledge. In two weeks she was about her room, having convalesced rapidly without an unpleasant symptom. The child, a fine boy, is doing well.

Case 5th. September 4th, at 3 o'clock, A. M., I was called to see Mrs. ——, of Lower Merion, in labour with her third child. She had been complaining all night. Her pains, when I first saw her, were not so frequent, nor so severe as they had been for some hours previous, and they continued to decline till they passed off altogether for a time during the middle of the day.

They again came on in the afternoon with more force and increased frequency. An examination shewed that no progress whatever had been made in the labour. The usual vaginal secretion was wanting, the vagina being preternaturally dry and rigid. On inquiry I found that there had been a leucorrhœa of some standing. As there had been no progress, I left her, and returned at 7 o'clock. An examination now shewed the labour to be progressing rapidly; the os uteri was well dilated, the head presenting with the vertex to the left acetabulum. The membranes were not ruptured, and the secretion of mucus quite abundant. I ruptured the membranes, after which the pains became very severe. I now suggested the use of the ether to my patient and her friends, to which they immediately consented.

In a minute after the application of the sponge, she began to talk in an excited strain on subjects unconnected with her case, till a pain came on, when she spoke of it in a light and merry mood, repeating the words, "a pain! a pain!" rapidly and mincing her words in such a way as to convey the idea that she was suffering very little. During the intervals between the pains, she talked wildly and incessantly, even when the sponge was applied to her face.

Her pulse was eighty-five when she commenced taking the vapour; it fell to seventy-six, and after she ceased to inhale, it rose to ninety-six. She seemed conscious of relief from the inhalation, and would call for more gas as she termed it, inhaling it with eagerness. She frequently remarked that she knew perfectly well what she was doing, knew her friends who were present, although she would call for them as though they were out of her sight, asking where they were when they were standing immediately over or by her. She boasted that the gas could not affect her: that her mind was superior to its influence. As the labour approached its termination, she seemed to suffer acutely, screaming violently, asserting that she would die,—"all your gas wont save me!"

At five minutes to 9 o'clock, P. M., she gave birth to a large male child, much larger than either of her others had been. She appeared to be perfectly conscious of its birth, but remarked, although she had suffered so much and complained so bitterly, that she could not have lived through it, if it had not been for the gas. This she repeated several times, after she had ceased to inhale the vapour, and after its effects had passed off.

The placenta came away in eight minutes after the birth of the child. There were no unpleasant symptoms, and the convalescence was rapid. A slight degree of inflammation of the child's eyes, which shewed itself in a few minutes after its birth, and which was attributable to the leucorrhœa of the mother, yielded to a mild astringent wash.

Case 6th. September 11th, at 4 o'clock, A. M., I saw Mrs. E., of Roxborough, aged 37, in labour with her sixth child. She had been ill all the preceding day, but the pain had not been very severe till night, when the paroxysms became quite regular and continued so till I saw her. Her pulse was 84 to the minute. On making an examination, I found the head well down in the pelvis, the os uteri dilated to the extent of several inches, and the vertex presenting to the left acetabulum.

The membranes were entire; I ruptured them, and as she was suffering acutely, though there was not a prospect of its continuing long, I proposed to her the use of the ether, and she gladly embraced the proposition.

In less than two minutes she was completely under its influence, and in a lethargic state, the pulse falling to 72. She was partially roused from this by the recurrence of a pain, but the re-application of the sponge re-induced the lethargy, during the continuance of which, and without any further inhalation, she gave birth to a healthy and vigorous female child. She knew nothing whatever of its birth, and was delighted with the relief she had experienced, saying she had been in a dream from the time she took the vapour. The mother and child are doing well.

BIBLIOGRAPHICAL NOTICES.

A System of Surgery, by J. M. Chelius, Doctor of Medicine and Surgery, Public professor of General and Ophthalmic Surgery, Director of the Chirurgical and Ophthalmic Clinic in the University of Heidelberg, &c. &c. &c. Translated from the German, and accompanied with additional Notes and Observations. By John F. South, late Professor of Surgery to the Royal College of Surgeons of England, and one of the Surgeons to St. Thomas' Hospital. In three volumes, 8vo. Lea & Blanchard: Philadelphia, 1847.

The foundation of the present publication is one of those admirable *handbooks*, for which several recent German medical writers have rendered themselves famous. The object of the author in its preparation was to supply a text book which should give a short

and clear description of Surgical Diseases and their treatment, and point out the best works on the several subjects. According to his plan, many things were slightly treated of, and others only hinted at, leaving the deficiencies to be supplied in his lectures. In subsequent editions, however, the author rendered his work more complete, and in the English translation Mr. South has supplied, very extensively, the omissions of the text.

In looking over the work, we have been particularly struck with the intimate acquaintance displayed with minute anatomy, and the changes and morbid products which occur from disease; the soundest views, both as to surgical pathology and treatment, are advanced on every subject, and generally in the clearest and most concise language. We meet with no affectation of originality; on the contrary, the best authorities are constantly referred to, and their very language quoted, where information or illustration is best attained in that way; we do not find the statements and opinions of others quoted, however, for the idle purpose of refutation and triumph, nor are the names of authors quietly omitted and shunned, lest the reader should discover the source from whence the most valuable materials are drawn. No such pettifogging is to be found in Chelius or his annotator; nor is it necessary for the interest of the work, for on every point treated of, evidence is afforded of a thorough acquaintance with the subject.

Diseases, according to Chelius, are either *dynamic* or *organic.* "This distinction can, however, only indicate a relatively predominant suffering of one or other phase of life, since the organic body presents in itself an entire whole, of which the several parts and phenomena are in the closest mutual connexion with each other.

"The organic diseases are especially those which originate in a destruction of the natural condition, form, and structure of organized tissues, and therefore may generally depend, 1. *On the disturbance of organic connexion;* 2. *On the unnatural union of parts;* 3. *On the presence of foreign bodies;* 4. *On the degeneration of organic parts, or on the production of new structures;* 5. *On the entire loss;* and, 6. *On the superfluity of organic parts.*"

"Organic diseases must be distinguished," according to our author, "into such as have their seat in parts inaccessible to mechanical contrivances, and to our organs of touch, and whose cure therefore can only be attempted by dietetic and pharmaceutic reme-

dies; or those whose seat permits the employment of external means, and regulated contrivances, and which in most cases can be brought to heal only by these contrivances, with the assistance of dietetic and pharmaceutical aids. *We may therefore distinguish, as belonging to the province of Surgery, all those organic diseases which have their seat in parts accessible to our organs of touch, or which allow of the employment of mechanical means for their cure.*"

"Although inflammation is excluded from this general definition, we must, however, still enumerate it generally, and particularly among the manifold origins of surgical diseases, when it attacks external parts. Inflammation, in its course and results, produces for the most part organic changes, and requires, when attacking external parts, almost always the employment of the so-called surgical means; further, among the surgical diseases soon to be more particularly described, there is not one of which the cause is not inflammation, which in its course does not produce inflammation, or the cure of which is not, to a certain extent, simply and alone possible by inflammation."

The following is the author's division of the subjects embraced in his work.

1st Division.—*Of Inflammation*—general, peculiar, and of special organs.

2d Division.—*Diseases which consist in a disturbance of physical connexion.*—Solutions of continuity; *fresh*—wounds and fractures; *old solutions*—false joints, hare lip, &c., ulcers, fistula, &c. &c.

3d Division.—*Diseases dependant on unnatural adhesion of parts*—Anchylosis, adhesion and closure of natural openings, as the mouth, nose, rectum, vagina, &c. &c.

4th Division.—*Foreign bodies*—introduced externally into our organism; formed in our organism by the retention of natural products; accumulation of unnatural secreted fluids, from the concretion of secreted fluids.

5th Division.—*Diseases which consist in the degeneration of organic parts, or in the production of new structures*—Enlargement of Tongue, Clitoris, &c., Bronchocele, Warts, Bunions, &c.

6th Division.—*Loss of organic parts.*

7th Division.—*Superfluity of organic parts.*

8th Division.—*Display of the elementary management of Surgical operations.*

Prefixed, we have a notice of all the prominent works relating to surgery which have appeared from the earliest period of its literature, including Journals and Periodicals, the value of which can hardly be estimated by any one who has not occasion for extensive reference; but what is of more importance to most readers is a most complete analytical index at the end of the work, occupying upwards of seventy pages closely printed, in double column. It is the most perfect performance of the kind we have ever seen. We are informed, that the work has gone through six editions in Germany, and been translated into seven different languages—an evidence of general appreciation which few authors live, like Chelius, to see bestowed upon their works, but which all who examine this production will admit to be fully merited.

To Mr. South, the profession is certainly under very great obligations, not only for a good translation of an excellent work, but for the extensive and valuable additions he has made to it, and without which, the author's short notices of many subjects would have been unsatisfactory to either the student or practitioner. With the exception of Diseases of the Eye and Ear, which are omitted in consequence of the author having comprised them in a separate volume, this edition of the *Hand Book* of Chelius, with the notes and comments of Mr. South, and the references of Dr. Norris, may be regarded as the most comprehensive work on Surgery extant.

Lectures on the Principles and Practice of Physic; delivered at King's College, London. By THOMAS WATSON, M. D., Fellow of the Royal College of Physicians; late physician to the Middlesex Hospital; and formerly Fellow of St. John's College, Cambridge. *Third American, from the last London edition. Revised, with additions.* By D. FRANCIS CONDIE, M. D., Secretary of the College of Physicians; Author of a Treatise on Diseases of Children, &c. 8vo. pp. 104. Philadelphia: 1847.

Handbuch der Medicinischen Klinik; verfasst von Dr. CARL CANSTATT: königlich-bayerischem Gerichtsarzte und Mitgliede mehrerer gelehrter Gesellschaften. Zweite vermehrte Auflage. 8vo. Erster Band, S. 370: Dritter Band, S. 911. Vierter Band, S. 798. Erlangen, 1843.

Lehrbuch der speciellen Nosologie und Therapie. Von CONRAD HEINRICH FUCHS, Professor zu Göttingen. 8vo. Erster Band, S. 674. Göttingen, 1845: Zweiter Band, S. 1250: Göttingen, 1845–1847.

Handbuch der Pathologie und Therapie. Von Dr. C. A. WUNDERLICH, Professor der Medicin; z. z. Vorstand der medicinischen Klinik zu Tübingen. 8vo. Dritter Band, S. 616. Stuttgart, 1846–7.

There is no end to treatises on the Practice of Medicine. In our last number, we announced one from our own country and city; and we have heard of other *indigenous* productions, that are in course of preparation,—some positively at the full period of utero-gestation, and requiring but an enterprizing bibliopolical accoucheur to usher them into independent being,—either to die of *atelectasis,* or to attain full development amongst the prized varieties of the species.

To-day, we have to herald a few *exotics*—one of which has been transplanted into our own soil; and under the fostering cares that have been bestowed upon it, and still more, owing to its own intrinsic life-powers, has become naturalized, extensively known, and as extensively appreciated amongst us.

Of Dr. Watson's Lectures we have spoken more than once,—as often indeed as a new edition has appeared. We have now to

announce a third. Of the original work we need not repeat the favourable sentiments to which we gave utterance when first we saw it. Without being complete, or equal in all its parts,—and where is the work that can exhibit entire *oneness* in its varied details?—it is generally excellent in its descriptions, didactic, and well expressed. There is something, too, attractive to the young more especially in the form and style of "Lectures." The reader seems to feel that he is listening to, rather than reading, the discourse; and more interest is felt, by the young more especially, and less fatigue experienced, than in more profound and serious essays on the same subjects, not conveyed in the like manner.

The basis—*Grundtext*—of Watson is the same as in the last American edition. The notes of the American editor, contained in that edition, are equally in this; but in addition we notice others, which are good and appropriate. We know, indeed, of no one to whom the task of editing such a work could have been committed with more propriety than to Dr. Condie. Possessed of a knowledge of various languages—Teutonic and Romanic—zealous in maintaining himself *a portè* with the existing condition of medical science everywhere; judicious and impartial; a supporter of no exclusive sect, system, school or *clique;* cosmopolitan in science, as every one ought to be,—it is a disgrace, indeed, to him that is not,—he is well adapted to be the exponent of the existing state of medical knowledge here and elsewhere. As the editor of a work like the one before us, he has not room enough to express his opinions fully and freely, but where he has done so, his additions have been of such a character as to cause us to regret that more *paper-room* had not been allowed him.

The "*Manual of Clinical Medicine*" of Dr. Canstatt is anything but a "Manual" (*Handbuch:*) as well might we term a blunderbuss a pocket pistol. It is not yet complete; and as the able author is dead, doubts may be entertained whether it ever will be. We have recently heard, however, from Germany, that another volume is about to appear. Both it and the "*Handbuch*" of M. Wunderlich are examples of what we took occasion to deplore, in noticing certain German works a short time ago.

Instead of issuing the volumes in proper order, we, at times—as in the case of that of M. Wunderlich—receive first the *third* volume. M. Canstatt's work—which is now in its second edition—is on a good plan. The first volume, which, in this case, *did* appear first, is on the elementary forms of disease, or what he terms "the morphological part of clinical medicine"—*Morphologischer Theil der Klinik;* and embraces Hypertrophy, Atrophy, Plethora, Anæmia, Chlorosis, Hyperæmia, Inflammation, Hemorrhage, Blood Disease, Anomaly of Secretions, Dropsy, Bright's Disease, Pneumatosis, Adiposis, Homologous Transformations of Tissue, (*Homoöplasie,*) Carcinoma, Tuberculosis and Scrophulosis, Lithiasis, Invermination, Softening, Induration, Fever, Neuroses, Nervous Erethism, (*Algien,*) Spasm, Anæsthesia, Acinesia, and Psychoses,—all subjects which he deemed it advisable to treat in a general manner, before passing to Special Pathology and Therapeutics, which occupy the remaining volumes. The *division*, which he adopts in them, is the anatomical: the third volume, for instance, which was issued after the first—the second not having appeared—embraces diseases of the head, spinal marrow, nerves and air-passages. In the detail of each of these, there is much system, and an ample bibliography, with numerous references to authorities, in the practical portions more especially. In this respect it differs greatly from the work next in order.

Of the work of Professor Fuchs of Göttingen we have received the first and second volumes,—the whole being intended to be comprised in that number; but it certainly is not complete. There are many topics that ought still to be treated of.

We confess we are not—as utilitarians—so well pleased with this production as with the others. It has not the same *practical* air about it as they have. We say "*practical*"—not in the cant language of the day, which is too apt to regard everything not practical that does not treat of *dosing*, but it seems to us too much attention is given by M. Fuchs to nosology, and to endless divisions and subdivisions, so that in the absence of an Index, which the parts issued do not possess, it is a task of no little labour to find out any special topic on which we may desire to see the sentiments of the author. The first volume, which

is addressed to his "beloved preceptor"—*seinem geliebten Lehrer*, Dr. J. L. Schönlein—a highly esteemed name in his *Vaterland*—treats of the Classes and Families of Disease, to each of which he gives learned appellations derived from the Greek, and for which he will have, of course, the blessings of the "harmless drudge"—the lexicographer; for we doubt whether they will ever be extensively disseminated except by him. We shall only refer here to his classes,—the arrangement of which he follows in his second volume, in inquiring into the genera and species—"*Gattungen und Arten.*" These are: *First.* "Diseases of blood-life"—*Hæmatonosen. Second.* "Diseases of nerve-life"—*Neuronosen;* and *Third.* "Diseases of Form and Formation"—*Morphonosen.* Of each of these he has several orders, families, genera and species, leading—as we have said—to learned confusion; and exhibiting much and useless metaphysical subtlety. The author is, however, a man of decided learning, and eminently instructed in his profession. His book will doubtless be properly appreciated among his countrymen, and may find, with advantage, a place in the library of every one acquainted with German Medical Literature.

The last of the books whose titles are at the head of this article, is the most adapted to our taste, both by its arrangement, and the fulfilment of details. It adopts the best of all divisions—that according to organs or apparatuses. The *third* volume, which is the *first* to appear—and the only one, by the way, that *has* appeared—embraces the diseases of the circulatory and respiratory organs, test subjects for an author, and one on which he cannot write a respectable treatise without being instructed in all modern diagnostic methods. The Prospectus states, that the third volume will embrace the diseases mentioned, as well as those of the digestive and urinary organs; but the volume really concludes with those of the respiratory organs. The whole work is promised by Easter, 1848. Its author is certainly a well read, learned and sensible physician; and his work is an excellent dissertation on the subjects comprised in it. We have consulted it on numerous occasions with much pleasure and profit.

The Dispensatory of the United States of America. By GEORGE B. WOOD, M. D., Professor of Materia Medica and Pharmacy in the University of Pennsylvania, one of the Physicians of the Pennsylvania Hospital, etc., etc., and FRANKLIN BACHE, M.D., Professor of Chemistry in Jefferson Medical College of Philadelphia, one of the Vice Presidents of the American Philosophical Society, etc., etc. *Seventh Edition, carefully Revised.* Grigg, Elliot & Co. Philadelphia: 1847.

We have much pleasure in announcing a new edition of this excellent work; not because of any deficiencies in the former edition, or of any large additions to be expected in the present, derived from improvements made within the brief period which has elapsed, but as evidence of a just appreciation of its merits. The authors have carefully gleaned from the periodical journals, and recent European treatises, everything of value which came within the scope of the work, so that it is fully up to the day. The publishers, too, have done justice to the work by the style in which it is brought out.

Wood's Quarterly Retrospect of American and Foreign Practical Medicine and Surgery. April to July, 1847. No. 1, Vol. 1. Richard and George S. Wood: New York.

This is a new publication, just projected, on the plan of Braithwaite and Ranking, but instead of semi-annually, it is to appear quarterly.

The present number contains sixty-four pages, double column, of well selected matter, embracing sixty-nine American articles and forty-one Foreign. The fault we would find with it is the want of attention to typographical accuracy.

We can see no reason why such a publication of indigenous origin should not succeed as well as the exotics, which we believe thrive bravely. It is perhaps true now, as in ancient days, that a prophet hath honour in all countries save his own. We see evidences of it daily; and yet as a people we are charged with being egotistical and self-sufficient beyond all example. We certainly are a little boastful, and have a right to be; we have more to be proud of than any other nation, as it regards our country and its institutions, and all that is wanting to perfect our

national character is a national literature. Why should not American learning, American talents and enterprise in literature and authorship, be fostered and protected as well as the grosser arts? Individually, we are the richest people on the earth; but the wealth that we have will only serve to brutalize and degrade us, without the refining influences of science and the arts.

THE MEDICAL EXAMINER.

PHILADELPHIA, OCTOBER, 1847.

EPIDEMIC CEREBRO-SPINAL MENINGITIS IN MISSOURI.

In our number for August last, (p. 506,) we inserted in the 'Record' department, a communication, addressed to the *New Orleans Medical and Surgical Journal*, on the subject of a highly fatal disease, which prevailed in the early part of the year in Mississippi and Tennessee, and was manifestly an affection of the same character as one which visited with fearful malignity different towns of France, attacking principally the common soldiers of the garrisons. It was seen also in Ireland in 1846; and everywhere has presented the same great general characters. The term *cerebro-spinal* seems to be applied to it with propriety, and it evidently attacks, in a marked manner, the gray matter in the centre of the cord—the nervous system of reflex actions. It would appear from the following extract of a letter, addressed to Professor Dunglison by Dr. W. C. Philips, dated Rocheport, Boon county, Missouri, September 13th, 1847, that the scourge has been devastating localities widely apart from each other, and it is not improbable that it may extend elsewhere.

"I take the liberty," says Dr. Philips, in his intelligent epistle, "of advising you of the prevalence of a disease, that has excited considerable interest in this country, from its nondescript and fatal character.

"*Symptomatology.* There are no invariable symptoms attending it. Generally, the patient has been in ordinary health, pursuing his accustomed occupation, and the first indication he has of the approach

of the disease is, perhaps, a pain in the hand, foot, arms, legs, eye, brain, lungs, stomach, or bowels. Any one, or a number of these locations in connection, may be primarily affected—sometimes there is a sensation of cords drawing at the back of the neck, producing stiffness. In one case, there was contraction of the occipito-frontalis, and the muscles of the face. In many cases, there is so much soreness of the surface, as to render the smallest amount of clothing intolerable. It is usually ushered in with a chill of variable intensity, succeeded by similar reaction, and this reaction is followed in from 3 to 12 hours by a second chill, and if disorganization has not previously taken place, (which is often the case) it appears to accompany, or immediately succeed it. In many cases, there is excruciating pain in the arms, legs, and other parts of the body, and this pain, when located in the limbs, is often accompanied by swelling of the joints and more or less loss of the use of the limbs, with stiffness and inability to move them. These pains are sometimes permanent, but at others, shifting from one point to another. The neck is often drawn backwards or forwards at an angle of almost 45° from its natural position, and so rigidly fixed, that it would break it short off to force it to resume its physiological position, and is swollen very much larger than its ordinary size. The external surface is sometimes beautifully spotted; and in a few cases there was an exanthematous eruption. The nervous system is deeply involved. There may be profound coma,—wild and furious delirium,—subsultus tendinum, &c., apoplexy and paralysis. In one case, there was blindness of one eye, accompanied with permanent pain in the head; also swollen joints, (terminated fatally.) Lungs may or may not be implicated. Stomach the seat often of nausea and vomiting. Bowels, nothing characteristic. In a few cases, there was gastro-enteritis. Trismus occurred in one case. In other cases, there was an inability to swallow any thing, from the swollen and painful condition of the larynx and pharynx.

"*Etilogy.* Most common form 10 to 15 years of age; but occurs at all periods of life. It resembles in many respects the prevailing disease of our country, (at the time of its occurrence last spring,) which was a modified form of pneumonia. There was, in both, the same soreness of the surface. The chill ushering in; the pneumonic symptoms and the swelling of the joints were similar; and the worst forms of the prevailing disease, and this malignant scourge, were similar in their duration, termination, &c. From these facts I infer, that they are produced by the same general cause, and that

there exist local causes where it prevailed giving its malignant type. The disease is confined to a section of country in the Missouri River bottom, which was the seat of a great overflow in June, 1844, at which time an extensive layer of sand was deposited upon the soil, entombing large crops of vegetable matter. After the overflow, this bottom has been unusually healthy until last spring, whilst the rest of our country has suffered far more from disease than usual. Would it be philosophical or scientific to say this overflow produced these local causes?

"*Prognosis* is unfavourable: five-sixths die. In many cases, it is death *ab initio*. When fatal, it is generally so in from six hours to two days."

DR. RUSCHENBERGER, U. S. N.

This able medical officer, whose services in the Navy have been long highly appreciated, not only when afloat, but in the naval hospitals of the country, and who has been not less distinguished for his incessant efforts to elevate the character of the corps, and to obtain for its officers—in which he succeeded—a fixed rank in the Navy, has left the Naval Hospital, New York, to reside in the place of his nativity—Philadelphia. Of that hospital he has had the professional care for four years; and has been succeeded by Surgeon Waters Smith.

The following—we believe, unusual—testimonial is honourable to the giver and the receiver, and we have no doubt was as true as it is honourable; and, although at the risk of offending the modesty of the party most concerned, we publish it as an incentive to others to merit the same tribute.

NAVY DEPARTMENT,
Bureau of Medicine and Surgery, Sept. 2d, 1847.

Sir,—I have to inform you, that the Board of officers, ordered on the 16th inst. to examine into the state and condition of the Naval Hospital at Brooklyn, then under your charge, have submitted their report to this office. The character of this report is so highly complimentary to yourself, I deem it proper to furnish you with an extract, as follows:—"The order, method, cleanliness and good discipline everywhere apparent, from the sick wards to the most inferior offices, were highly satisfactory. The exact system of accounts deserves to be particularly noticed as an act of justice to the surgeon, who has devoted great pains and much labour in the details.

"Unusual attention was observable in the Laboratory Department, which has been turned to a good account, in an economical view, in

the preparation of many articles of materia medica, as well as securing uniformity in the strength of various preparations."

I have the pleasure to add, that I am authorized to signify to you the high satisfaction entertained by the Department for the very able manner in which all your duties have been performed while Surgeon in charge.

Respectfully,

THOMAS HARRIS,
per J. L. FOX, Assistant to Chief.

DR. W. S. W. RUSCHENBERGER, Surgeon, U. S. Navy, Brooklyn, N. Y.

DOCTOR ANDREW COMBE.

[We are indebted to a friend for the following notice of Dr. Combe, which will be read with interest, especially by those who are conversant with the admirable productions of his pen.]

Of the death of Dr. Combe, our readers have been apprised through the public papers. On us devolves the duty of indicating the special merits of our deceased brother, and the loss to the profession by his death. Here, if any intelligent reader were at our side, he might interrupt us by remarking on the signal services rendered to mankind by the writings of Dr. Combe, and allege that still, in a greater degree, must his loss be felt by the members, generally, of every community, than even by his professional brethren. Literally, and in its full meaning, may it be said, that man, woman and child, are under the strongest obligations to this popular writer, for his singularly lucid and practical teaching of hygiene, in connexion with physiology, as evinced in his different works, of which we shall soon speak under their respective titles. In another point of view, the labours of Dr. Combe furnish a lesson of encouragement to those who, owing to failing health, might be deterred from prosecuting their literary and professional labours, and of reproof to others who plead every slight indisposition and mental depression as excuses for not discharging their duties in these respects. He became a victim to the inroads of pulmonary consumption soon after the age of manhood; but yet he continued to be the zealous student, and at intervals the industrious and successful writer, during the whole of the period between the date of his first attack of disease, in 1820, and that of his death, on the 9th of August, 1847, a little before he had attained his fiftieth year.

Doctor Combe was born in Edinburgh on the 27th of October, 1797, being the fifteenth child, and seventh son, of parents whose entire progeny numbered seventeen. Having gone through the usual course of instruction at the High School, he was bound apprentice, in

conformity with the usage in Great Britain, to the late Henry Johnston, Esq., surgeon in Edinburgh, and in 1817 he had acquired an amount of knowledge which entitled him to be licensed as a surgeon. With the view of farther qualifying himself for medical parctice, he next repaired to Paris, where two years were laboriously spent in attending on the hospitals and listening to the instruction so prodigally given out in the lectures of the many professional celebrities of that capital. In 1823 he began to practice in Edinburgh, and about two years later took there his medical degree. Success attended his professional labours, marked as they were by sagacity, kindliness and conscientiousness; and he was in the course of a few years in the enjoyment of a flourishing practice. But a return of symptoms of pulmonary disease obliged him, in 1831, to proceed to Italy, where he had been once before from a similar cause. He was, however, able to pass the winter of 1832–3 in Scotland, and in the latter year to resume his practice. "In 1836 he was honoured with the appointment of Physician in Ordinary to the King and Queen of the Belgians, and for several months attended the royal family in Brussels; but the climate proving unfavourable to him, an alarming return of his pulmonary symptoms abruptly sent him back to recruit his health in his native land. Subsequently he continued to act as consulting physician to their Majesties, and occasionally paid them a visit. About six or seven years ago, he was appointed one of the Physicians Extraordinary to the Queen in Scotland, and afterwards one of her Majesty's physicians in Ordinary in this part of the united kingdom. He was, also, a Fellow of the Royal College of Physicians of Edinburgh, and a corresponding member of the Imperial and Royal Society of Physicians of Vienna."

The works by which the name of Dr. Combe is best known to the public, are—"The Principles of Physiology applied to the Preservation of Health, and to the Improvements of Physical and Mental Education," of which twelve editions have been called for since its first appearance in 1834; "The Physiology of Digestion, considered with Relation to the Principles of Dietetics," originally published in 1836, and now in the seventh edition; and "A Treatise on the Physiological and Moral Management of Infancy, for the use of Parents," of which the first edition came out in 1840, and the sixth or People's edition, in June of the present year.

These works have been republished in the United States, and the first and third mentioned have gone through many editions. This last was edited by Dr. Bell in a manner that gave much satisfaction

to the author. As it is the fashion, just now, with some of our home critics, and particularly with those who are quite innocent of any literary attempt themselves, to speak in terms of disparagement of American editions of English works, we shall quote the concluding paragraph of the introduction to the last edition of the "Treatise on Infancy:"—"Here I cannot resist the opportunity of expressing my grateful acknowledgments to Dr. John Bell, of Philadelphia, for the time and trouble which, amidst many pressing avocations, he so kindly and disinterestedly bestowed, not merely in superintending the republication of this work in the United States, but in enriching it with many valuable notes, for the purpose of adapting it more completely to the domestic habits and wants of the Transatlantic public. To Dr. Blicker, of Copenhagen, I am also indebted for its appearence in a Danish translation."

The aim of Dr. Combe, in preparing these works, is well expressed in the following sentences, by the author himself. "In teaching dietetic rules and hygienic observances, therefore, the precepts delivered should be connected with and supported by constant references to the physiological laws from which they are deduced. Thus viewed, they come before the mind of the reader as the mandates of the Creator; and experience will soon prove, that, by his appointment, health and enjoyment flow from obedience, and sickness and suffering from neglect and infringement of them." That he was entirely successful in his estimate, both of the importance of the subjects, and of the manner in which they are best taught, is shown by, not merely the wide circulation, but the careful study of his different treatises.

Dr. Combe and his elder brother, Mr. George Combe, with whom in this country he is often confounded, were among the leading members of the Edingburgh Phrenological Society, instituted in 1820. He contributed two essays to the volume of Transactions, published by that body in 1824, and subsequently wrote many valuable papers in the *Phrenological Journal*, which was commenced in 1823, and now extends to twenty volumes. In 1831, Dr. Combe published "Observations on Mental Derangement; being an application of the Principles of Phrenology to the Elucidation of the Causes, Symptoms, Nature, and Treatment of Insanity." This work has long been out of print; the infirm health of the author having, as he tells us, prevented him from devoting that attention to the treatment of insanity, and, consequently, of "doing that justice to the subject, which its later progress and inherent importance imperatively demand." In the beginning of 1846, his strong conviction of the importance of

phrenology to medical men, induced him to write, at the penalty of considerable fatigue, an "Address to the students of Anderson's University, Glasgow, at the opening of Dr. Weir's first course of lectures on Phrenology."* It was delivered to a crowded audience by his brother, (Mr. George Combe,) and subsequently appeared as a pamphlet. He also contributed several articles to the *British and Foreign Medical Review*, and was an occasional writer on medical and sanitary subjects in the columns of the *Scotsman*, a paper conducted with great ability and exerting no little political influence in North Britain.

From the biographical sketch of Dr. Combe, which appeared in the Scotsman of Aug. 21, we extract the following characteristic traits of the deceased, in the accuracy of which we have full reliance. For ourselves we cannot boast of the advantage of much personal intercourse with Dr. Combe; but, even from the slight acquaintance with him which his few days' visit to Philadelphia, in the early part of the last summer, allowed us to make, we are prepared to adopt the opinions of his friend in the paper just referred to.

"The decease of Dr. Combe, will have taken no one who knew him by surprise, for he was for many years in that condition, with the loss entirely of one lung, which makes life a greater miracle than death; but it will not on this account be the less deplored, either as causing a blank in the circle of private friendship, or as the signification of a public loss. Dr. Combe belonged to that rare class of physicians who present professional knowledge in connection with the powers of a philosophical intellect, and yet, in practical matters, appear constantly under the guidance of a rich natural sagacity. All of his works are marked by a peculiar earnestness, lucidity and simplicity, characteristic of their author; they present hygienic principles with a clearness for which we have no parallel in medical literature. To this must be ascribed much of the extraordinary success they have met with, and on this quality undoubtedly rests no small share of their universally acknowledged utility. Those, however, who look below the surface will not fail to trace a deep philosophical spirit, as pervading these works, something arising from a perfect apprehension of, and a perfect allegiance to the natural rule of God in our being. It has been a guidance, one would almost say an inspiration, of the author, without ever carrying him for a moment where ordinary readers could not follow him. Here we think is the true though latent strength of Dr. Combe's popular writings, and that which will probably give them a long, enduring preeminence in their particular department. We always feel, in reading them, that we are listening to one of those whom nature has appointed to ex-

*Printed in the London Lancet, and in the Bulletin of Medical Sciences, edited by Dr. Bell.

pound and declare her mysteries for the edification of her multitudinous family. In his own section of her priesthood, certainly few have stood in his grade, fewer still become his superiors.

"The personal character and private life of Dr. Combe formed a beautiful and harmonious commentary upon his writings. In the bosom of his family and the limited social circle to which his weakly health confined him, he was the same benignant and gentle being whom the world finds addressing it in these compositions. The same clear sagacious intelligence, the same entire right-mindedness, shone in his conversation. An answer to any query put to him, whether respecting professional or miscellaneous matters, was precisely like a passage of one of his books, earnest, direct and conclusive. Whatever measure he called upon others to do or to avoid, that he did, and that he avoided, in his own course of life; for doctrine, with him, was not to be treated as external to himself, but as the expression of a system of divine appointment, of which he was a part. To his rigid though unostentatious adherence to the natural laws which he explained, it was owing, that he sustained himself for many years in a certain measure of health and exemption from suffering, while labouring under the consumptive tendency which finally has cut short his career. On this point, there is the more reason to speak emphatically, when we reflect that the years thus redeemed from the grave were employed in that which will yet save many from premature death, as if it had been his aim to show the value of even the smallest remains of life and strength, and thus advance one of the principles dearest to humanity. It was not, however, in any of these respects that the character of Dr. Combe made its best impression, but in his perfect geniality and simplicity, and the untiring energy of his practical benevolence. Here resided the true charm of his nature, and that which made him the beloved of all who knew him. No irritability attended his infirm health; no jealousy did he feel regarding those whom superior strength enabled to outstrip him in the professional race. Kindly and cordial to all, he did not seem to feel as if he could have an enemy, and therefore we believe he never had one. It might almost be said that he was too gentle and unobtrusive—and so his friends, perhaps, would have thought him, had it not, on the other hand, appeared as the most befitting character of one who, they all knew, was not to be long spared to them, and on whom the hues of a brighter and more angelic being seemed already to be shed."

In a letter from a near relative of Dr. Combe, announcing the death of the latter, addressed to Dr. Bell, it is stated that Dr. C., after going to bed on the evening of the 2d of August, in his usual state of health, was seized with diarrhœa, under which, after ineffectual attempts to check it, he sank on the 9th of the same month. He had very little suffering, and his mind continued calm and cheerful to the last. Frequently, he expressed his thankfulness that he was

permitted to depart so easily. The immediate cause of his death was ascertained, in *post mortem* examination, to be a "chronic disease of the bowels, terminating in ulceration." "The left lung was wasted away and completely useless; the right nearly, or altogether entire." For years past Dr. Combe knew that his left lung was gone; his chest on that side had sunk in. We shall probably yet receive a more detailed account of the structural changes from Dr. John Scott, who was his professional attendant and friend.

OBITUARY.

Died, on the 30th of August in the city of New York, JAMES A. WASHINGTON, M. D., in the 46th year of his age. Dr. W. studied medicine in this city, and was sometime one of the resident physicians of the Pennsylvania Hospital. The following account of the post mortem examination of the body, we extract from the Annalist of the 15th ultimo. It will be read with a melancholy interest by his many friends in Philadelphia.

To the EDITOR of the Annalist.

I send you an account of the post-mortem appearances of our much-lamented medical brother, Dr. Washington, who has been so suddenly removed from among us, believing it will be interesting to your medical readers. At the request of Dr. Parker, I made the autopsy eighteen hours after death. Present, with Dr. Parker, Drs. Delafield and Borrowe.

External Appearances.—The body is not emaciated, but slightly jaundiced, and decomposition is commencing about the neck; on the abdomen are marks of leech-bites, and a blister.

Head.—Not examined.

Chest.—Heart, normal. Left lung:—upper lobe united by very old adhesions; the lung otherwise normal. Right lung:—in the summit of the upper lobe was found a small obsolete tubercle, about the size of a buck shot, while the posterior part of the lower lobe was congested.

Abdomen.—The subcutaneous cellular tissue loaded with fat about one inch in thickness. The muscular tissue was red and firm; on dividing the peritoneum, the omentum was found matted together, and lying over to the right iliac region, and adherent to the caput coli, where it formed part of the walls of a fœcal abscess, which was situated in the right iliac and lumbar regions; the remaining portion of the walls of this abscess was formed partly by the caput coli, folds of the ileum, and the peritoneal lining of the wall of the abdomen; it was lined by a recently formed grayish false membrane; the cavity was about the size of a hen's egg, containing a small quantity of light-brownish coloured feculent matter; at the lower part of the abscess, the appendix cæci vermiformis was found in a gangrenous condition,

and on its careful removal, it was found obstructed by a small body about the size and shape of a bean, lodged about half an inch from its connection to the cæcum. Beyond this, the vermiform process was gangrenous; there was a small perforation at its extremity, from which the feculent matter had escaped. The mucous coat of the caput coli was red, thickened, and covered with small granules of lymph; the remaining portion of the colon was healthy. Several folds of the ileum and jejunum were adherent by recently formed lymph, but there was very little effusion into the abdominal cavity.

Stomach and spleen, normal.

Liver about its natural size, of a yellowish granular structure; the gall bladder was filled by dark, greenish, inspissated bile; gall ducts clear.

Kidnies.—The left enlarged, and in the early stage of granular disease; right, healthy.

Sincerely yours,
G. A. Sabine, M. D.

MEDICAL APPOINTMENTS.

The following appointments of Professors have recently been made:

University of Pennsylvania.—James B. Rogers, M. D., Professor of Chemistry, vice Professor Hare, resigned.

Ohio Medical College.—Professor L. M. Lawson, of the University Transylvania, Professor of Materia Medica, vice Prof. Harrison, transferred to the Chair of Theory and Practice of Medicine.

Hampden Sidney College.—Charles Bell Gibson, M.D., Professor of Surgery, vice Professor Warner, deceased.

University of New York.—Professor S. H. Dickson, of the Medical College of South Carolina, Professor of Theory and Practice, vice Professor Revere, deceased.

College of Physicians and Surgeons of the city of New York.—Professor Alonzo Clark, of Pittsfield, Lecturer on Physiology and Pathology.

Medical College of South Carolina.—Dr. Bellinger, Professor of Surgery, in the place of Professor Geddings, transferred to the Chair of Practice, vice Dr. Dickson, resigned.

Philadelphia College of Medicine.—Henry Gibbons, M. D., Professor of Institutes and Practice of Medicine, vice Prof. Thomas D. Mitchell, resigned. D. P. Gardiner, M. D., Prof. of Chemistry, vice Professor Allen, resigned. Lòuis H. Beatty, M. D., Professor of Obstetrics.

Hampden Sidney College and University of Virginia.—Professor Cabell, whose appointment to the Chair of Surgery in Hampden Sidney College was recently announced, declines the appointment, and retains his connexion with the University of Virginia.

ANNUAL ANNOUNCEMENTS.

We have received the following Annual Announcements and Catalogues of Medical Colleges:

Annual Announcement of the Medical Department of Illinois College Jacksonville, Ill. Session of 1847–8.

This College has five professors. The lectures commence on the first Monday in November and continue four months. *Number of the last class*, 39; *of graduates*, 13.

Fifth Annual Announcement for 1847–48, *and Catalogue for* 1846–47, *of the Rush Medical College, Chicago, Ill.*

Rush Medical College has six Professors. The lectures commence on the first Monday of November, and continue *sixteen weeks.* Number of the class attending the last session, 70; of graduates, 16.

Catalogue of the officers and students of the Medical Department of Hampden Sidney College, in Richmond, Virginia. Session of 1846–47.

The Faculty consists of six Professors. The lectures commence on the first of November, and continue until the third week in March. Number of the class, 75; of graduates, 17.

Annual Circular and Catalogue of the Medical Department of the University of Buffalo.

Number of Professors, 7; of the class, 67; of graduates, 18.

The lectures commence on the last Wednesday in February, and continue sixteen weeks.

CORRECTION.

The last number of the Examiner contained an elaborate article on the principal antidotes or counter poisons, without the proper credit. It was translated by a young friend for the Examiner, from the *Annuaire de Thérapeutique* of Bouchardat, for 1847.

RECORD OF MEDICAL SCIENCE.

Ship Fever at the Bellevue Hospital.

To the Editor of the New York Journal of Medicine:

Dear Sir:—In compliance with your request, I send you the enclosed brief statement of my observations and experience at Bellevue Hospital, during the late prevalence of Ship Fever, in the midst of which I was appointed to the charge of the establishment, in May last.

Your readers are doubtless informed of the immense influx of pauper immigration into the port of New York, especially from Ireland, during the present year. Their impoverished condition by reason of the famine at home, had superinduced a morbid *predisposition*, which only needed, an *exciting cause* to develope those functional disturbances, which characterize fever. Their circumstances on ship-board, being crowded together between decks, to an extent little short of that said to be resorted to in slavers; short of provisions, and even of water; without the possibility of cleanliness or ventilation; presented a combination of morbid agencies which could scarcely fail to generate not merely fever, but *pestilential fever*, in some malignant form. Amid such accumulated filth and wretchedness, it is not at all wonderful that such frightful reports of disease and death should herald almost every arrival; nor could it reasonably be expected otherwise, than that our hospitals and almshouses should be crowded with the sufferers, borne thither on landing, either already sick, or so deeply infected as to render escape from an attack of fever scarcely possible.

Such has accordingly been the fact, and to an extent which may be estimated from the following statistical items prepared from the best data found in the hospital.

From the 1st of January, 1847, to May 25th, this hospital was under the charge of my predecessor in office, who admitted during this period 769 cases, many of them direct from ship-board. Of these, as appears by the record, 306 were discharged cured—154 died, and 309 remained in the hospital under treatment, a large portion of whom were nearly moribund, when I assumed the charge as resident physician.

At that time, May 26th, 1847, there were over 800 patients in the house, 309 were suffering with ship-fever. Cases of the latter description were then admitted at the rate of 60 to 80 per day, so that within a week or two, notwithstanding deaths and discharges, the number had increased to 1147 in the hospital, over 600 of whom were ill with the ship-fever.

With this large number, being so much beyond the capacity of the hospital buildings to accommodate, and alike beyond the available re-

sources of the establishment, to furnish immediate supplies, very great suffering, and appalling mortality were unavoidable, until other and more extended facilities could be provided. The crowded state of the wards, which could not be adequately ventilated or even cleansed, had already resulted in developing an *endemic* atmosphere, for only in confined and impure air is this fever ever infectious. The proof that it had become so, was seen in the fact that a majority of the medical assistants had already sickened, and one of them had died. Many of the nurses were sick and some of them dead. Moreover, the adjacent alms-house building, with a population of 1500, began to give proof of having become infected, no less than 17 cases of the identical form of fever having occurred within 48 hours, some of which were rapidly fatal.

Under these appalling circumstances, 80 tents were pitched upon the adjacent green, and were immediately filled with the patients from crowded wards, which thus admitted of being whitewashed, cleansed and ventilated. A number of shanties in the yard were soon filled in like manner and for the same purpose. By these and the like extemporaneous devices, ample room was provided for the increasing number of patients, and a thorough purification of the apartments was attained. And here, as in other cases, it was soon demonstrated, that the patients who were removed into the open air immediately improved, and a very large portion of them soon recovered. The new cases were very generally placed in the tents, and my records show that over 200 cases were discharged cured from the tents, no one of whom had entered the walls of the hospital.

But to return to the statistics of the hospital. It appeared by the books that from May 25th to August 3d, 1847, there were admitted into the hospital 917 cases of ship-fever, which, added to those remaining in the house, makes the aggregate of cases treated within that period amount to 1226 during about ten weeks.

By a table, prepared August 3d, the following results are furnished, viz.:

Discharged cured,	724
Died,	193
Convalescent,	129
Remaining under treatment,	180
Whole number as above,	1226

From these respective data, the whole number of cases of ship-fever admitted into this hospital since Jan. 1st, 1847, has been 1995, of whom 347 have died, which latter number gives the aggregate mortality, down to Aug. 3d, the date to which the calculations have been made. It gives an appalling aspect to the fever, but furnishes no just criterion of the necessary fatality of the disease, nor of its want of amenability to judicious treatment; as appears from the fact that a very large proportion of the cases were brought in suffering under the profound coma which characterizes late periods of the disease, and still worse, very many were moribund when they reached

the hospital. No less than 17 died during one week, within four hours after admission, while four, during the same week, were dead before they could be carried to their beds. The folly and inhumanity of sending dying persons in a heavy carriage over the rough pavements, to so distant a hospital, must be painfully obvious, extinguishing, as it often does, the spark of life which remains, and which else might possibly be revivified.

The following extracts from the weekly reports since May 26th, 1847, though they include deaths from *all diseases*, may aid in arriving at the comparative mortality, before and after the cleansing and ventilation of the hospital; and the removal of hundreds of the sick for treatment into the open air; a measure resorted to in this instance from necessity, but found highly salutary and useful, especially in the management of ship-fever.

	No. of patients.	Deaths.
1st week,	1142	71
2d "	1020	59
3d "	956	35
4th "	985	39
5th "	981	41
6th "	956	38
7th "	937	30
8th "	947	31
9th "	868	25

During this period, the cases of ship-fever numbered about one half of all the diseases in the house; and differing but little from this ratio in the proportion of deaths, showing that the mortality, of late, is not greater than that resulting from other diseases. Since Aug. 3d, the cases of fever have been diminishing rapidly, and the whole mortality of the hospital has not exceeded 18 weekly. At present, Aug. 23, there are not more than 50 cases of the fever in the establishment, the most of these having been landed at Quebec, whence they have found their way to this city, and these less malignant and dangerous than those we have heretofore treated.

This subsidence of the fever, so that the discharges now exceed the admissions, has reduced the aggregate of patients below 700, so that the tents have now been emptied, and I find ample room for all in the wards of the hospital; while the comfortable state of these wards, and the encouraging condition of the sick, are sources of no small gratification.

In respect to the peculiar nature and specific character of this fever, the late period at which the patients generally reached the hospital, has precluded very accurate observations. Occasional opportunities, however, have occurred for watching its inception and progress in the persons who sickened on our premises. Many of these came hither from on ship-board apparently in health, but really in a state of morbid predisposition, though latent, which soon after developed itself in an attack of the fever, as well characterized as were the cases which had fully developed the disease on board of the same ships. While

others occurred among the assistant physicians, orderlies and nurses in the hospital, which were as well marked by pathognomic signs throughout their whole course; nor could they be discriminated in their symptoms, stages, or duration, from those direct from the ships. In the latter examples it is evident that the malady originated from the pestilential atmosphere generated within our walls, which was sufficiently potent at one time to become both the remote and the exciting cause, the same identical agency being sufficient to produce the predisposition, and afterwards develope the fever.

Nor is there the slightest foundation for the suspicion of any specific contagion in the case, as is seen in the fact that no new instances of the fever have occurred in the premises, since the cleansing, purification, and ventilation of the establishment has been effected; so that the rationale of the infection which was undoubtedly *endemic* here, and had become *epidemic* in the vicinity, must be obvious; and is precisely the same as that existing on ship-board in the instances of sickness and death which have become so lamentably notorious. The want of pure air, of wholesome food, and of pure water, are privations which by a physical necessity generate disease. In a crowded hospital, as well as in a crowded ship, filthy apartments, ill-ventilated wards, and the confined air resulting from such untoward circumstances, have from time immemorial been known to be such violations of hygenic laws, as will develope pestilential fever. All who inhale such an atmosphere for any length of time become sick, and each sufferer by the morbid exhalations from his skin and lungs, contributes to augment the infection, and increase the sources of danger to himself and others. Still worse, if amid such a crowd there be, as is too often the case, a neglect of personal cleanliness, and a failure to remove the morbid excretions, which, if allowed to remain, vastly add to the intensity of the atmospheric poison. Such are the precise circumstances under which, in certain latitudes and given temperatures, *ship*-fever, jail-fever, and *hospital*-fever have been generated and perpetuated. Such a pestilence may be manufactured to order; and may be arrested with equal facility by obeying the laws of hygeine, instead of violating them. So much for the contagiousness of the ship-fever. As to the figment of "contingent contagion," it is only contingent nonsense.

Those who have imagined that in this much dreaded "ship-fever," there has been any distinctive or specific character constituting it a new disease, or in any sense *sui generis*, must have had very limited opportunities for observing it. Nor is there anything in its pathology or treatment contradistinguishing it from the family of congestive fevers, of which it is a familiar variety, modified, however, by different causes, but always characterized by the same type. Indeed, this identical fever has been annually observed to greater or less extent on board ships, in our hospitals and in other crowded apartments of our city, inhabited by a degraded population; and it has often appeared in jails, prisons, etc., in various sections of our country.

The symptoms, course and type of the ship-fever here, have been

identical with those of that form of malignant disease denominated "Typhus Petechialis," modified in different examples by age, sex, temperament, habits of living, etc., but all bearing the impress of the same cause, proving their absolute identity in nature, though differing in degree. Always congestive, often inflammatory, and very frequently both the one and the other, constituting the mixed fever of modern writers.

In the example which came under our observation sufficiently early to allow of recording and discriminating its premonitions and development, there was found very great uniformity. The earliest and most prominent symptoms of an attack, have been sudden loss of strength, soon followed by a sense of overwhelming debility, while as yet there was no appreciable functional disturbance. A disinclination for food and an inability to sleep supervened, often with great rapidity. The tongue and eyes usually presented the first distinct morbid appearances, the former becoming coated and the latter red and watery, while no manifest febrile symptoms, properly so called, were discoverable. At this period a slight chilliness was often complained of, though not always cognizable. A full chill did occasionally occur, but it was but very seldom. Nausea was very often present, and in a few rare cases vomiting, with or without diarrhœa, seemed to designate the development of the fever. The skin remained dry, and slightly elevated in temperature, while the pulse indicated the presence of indirect debility, though differing in frequency very little from the natural standard for several days, when it usually became accelerated somewhat, and in bad cases soon fell below 70 in the minute.

The most constant characteristics of this fever were great apathy, and apparent indifference to life; sudden and continued deafness; a mental torpor which could not be roused to sensibility, and the absence of all pain, or at least of all complaining, except of weakness, which was universally present throughout the whole course of the disease. Petechiæ, though not invariably present, were very generally so, occasionally over the entire body, but more frequently upon the neck, chest, and abdomen, in which situations they usually were most visible and most numerous. In general, these appeared about the seventh day, but often earlier, sometimes on the third day; and I have seen them in great numbers as late as the seventeenth day of the disease, with and without sudamina, especially over the abdomen. The tongue presented very variable appearances, sometimes continuing white and thickly coated throughout, more frequently, however, becoming dry, brown, and even black, with occasional sordes, but the latter very rare, even in fatal cases. Delirium was very generally present after the seventh day, followed after a few days by coma, stertorous breathing, and subsultus tendinum, but these latter symptoms were not frequent.

In most of the cases, prior to the occurrence of delirium, a diarrhœa to greater or less extent was present, which was difficult to control by the usual remedies, when the excretions were biliary in their

character; while it readily yielded under other circumstances, to a single dose of castor oil and laudanum. When this diarrhœa ceased, either spontaneously or as the result of medication, if at the same time the skin was open, convalescence was usually rapid, and a favourable prognosis might be safely made.

Relapses were frequent, even after entire convalescence, but most generally the result of some error in diet. In these the worst cases were those in which diarrhœa recurred, or erysipelatous inflammation exhibited itself. The latter cases were numerous, and sometimes fatal. Extensive suppurations of the parotid and other glands were among the worst sequelæ, and these mischiefs were observed especially with the intemperate, who were so numerous as to greatly augment the mortality of the hospital.

In respect to the treatment of this fever, there could be but very little difference of opinion among practical men, in reference to the majority of those patients received into this hospital, arriving, as they very generally did, in the later periods of the disease. So plainly was blood-letting contra-indicated, that, with the exception of a single instance, it was never resorted to by myself or assistants, nor was it even proposed by any of my medical friends who visited us, after inspecting the patients. Cupping was used in a few examples for the relief of local complications, and then always with advantage. But in general the aspect of the case forbade any depletory measures, or other active treatment. Even a single drastic purge was inadmissible, nor could it be given with impunity.

The successful means adopted by us may be thus detailed. A mild laxative was prescribed, if necessary, in the beginning, after which a dose of the Sp. Mindereri, with or without a grain of Ipecacuana, was given every hour or two, according to the urgency of symptoms, and this course steadily pursued until free perspiration was induced. Meanwhile nutritious drinks were used, such as oat-meal gruel, rice or barley water, arrow root and milk, beef tea, and the like. Ice and iced water were freely used, and when much heat was present, the head, neck, and body were sponged with ice water. Mustard plasters and blisters were used when diarrhœa or delirium supervened, or any indications were present of local lesions, or increased debility. So soon as any flagging of the pulse appeared, milk punch, wine whey, or brandy and ammonia were resorted to, and continued so long as stimulation was called for. These latter agencies had to be used to a very great extent in many cases, and with the best results.

Such was the general course of treatment, modified as circumstances demanded. When the diarrhœa became threatening, injections of nitrate of silver, a drachm to the pint, were found of great value. Dysenteric symptoms were arrested by calomel, opium, and ipecacuana, with injections of iced water. Erysipelatous complications were treated chiefly with quinine, and mercurial ointment, and occasionally by blisters and nitrate of silver. And so of local lesions, which but rarely occurred, the principles of rational medicine being our guide. The limits assigned me forbid greater particularity or amplification.

The pathological results of this fever, as shown by dissection, will soon be given to the profession in the forthcoming report of the Committee of the New York Academy of Medicine, from the notes of our excellent friend, Dr. Sabine, who, as one of the committee, has been pursuing that branch of inquiry. I may be pardoned, therefore, for the present, in only indicating what will then appear, viz.: that effusion in the ventricles of the brain was discoverable in almost every fatal case, and this for weeks together, while the autopsies were daily made. The absence of the intestinal ulcerations, which characterize the Dothinenteritis of the French writers, proved that our endemic, at least, has been called Typhoid fever by a misnomer, while the cerebral mischiefs so constantly observed, identify this fever with the other varieties of Typhus fever, being the petechial species of the genus; its malignity and danger having been the result of causes already indicated as accompanying its origin and prevalence.

Should this desultory letter serve your present purpose, written as it has been amid pressing avocations here, you may shortly hear from me again on the same topic, when more leisure shall be allowed me. For any measure of success which has accompanied my exertions in this hospital, I am greatly indebted to the diligence and toil of my assistants, Drs. O'Neil, Wendel, Mott, and Davis, who, with myself, providentially escaped the disease, while all the rest were visited by one or more attacks of fever. I am likewise under many obligations to Dr. F. Campbell Stewart, and Dr. A. V. Stout, who, at the most critical period, volunteered their valuable services and spent weeks with me in the hospital. Many others of my professional brethren, by their frequent visits, their counsel and sympathy in the trying duties to which I have been called, might be worthily mentioned, for all are gratefully remembered. Happily, none of my medical assistants fell victims to the fever, though eight of them were sick, and some of them suffered severe and dangerous attacks. In their treatment, Drs. Chalmers, Cheesman, Johnson, and others of the profession, rendered unremitting and valuable aid. You will forgive me for thus alluding incidentally and gratefully to these "friends in need," though writing for a Medical Journal, for I should do violence to the impulses of my heart, should I refrain. Their kind offices merit a better memorial, and serve to make us prouder of our noble profession.

With great respect, I remain,

Your obedient servant,

D. M. REESE, Resident Physician.

Prof. C. A. Lee, M. D.

Aug. 28th, 1847.

A Case of Vesico-Vaginal Fistula remedied by Caustic. By ELAN W. HARRIS, M. D., of Elm Wood, Cape Girardeau county, Mo.—Mrs. C., a married lady, aged 30 years, presented herself to me early in February last, laboring under the unfortunate, painful, and disgusting infirmity of vesico-vaginal fistula. Her garments were constantly wet; the vaginal cavity, labia and thighs bathed with urine,

in an erysipelatous condition, and exquisitely tender. The complaint had existed for five years, and occurred seven or eight days after a tedious first labor, and violently severe manipulations of her midwife. In addition to the soreness caused by the irritation of the urine, she suffered violent pain in the bladder, which often prevented sleep whole nights; she sometimes passed urine the natural way for a day or two at a time, but always with great pain, and if, during her monthly periods, the urine is discharged through the urethra it is mixed with the catamenial fluid, just as it is when the urine passes through the fistula and vagina.

The parts being too sore to attempt any exploration, recumbency, aperients, fomentation, and tepid lotions were enjoined. In a few days, her condition being much improved, the finger was introduced into the vagina, the walls of which felt hard and irregular, presenting to the finger the sensation of cicatrices. No os tincæ or neck of the womb could be felt. The vaginal speculum was now carefully inserted into the vagina, which terminated in a round sack-like cavity without anything like the neck of a womb projecting into it. Instead of an os tincæ, a small opening was found large enough to admit a silver probe which entered the uterus; about three quarters of an inch from this aperture, in the anterior wall of the vagina, was found an oblique fistulous opening into the bladder (five lines in extent), through which the urine could be seen flowing. The bladder was then sounded, and I soon convinced myself of the existence of a calculus. The patient was informed that the only relief that could be afforded was by extracting the stone, and that there was barely a hope that the fistula might be healed, and thereby relief obtained from the troublesome and disgusting incontinence. She replied that she would willingly submit to *any* operation rather than remain in her miserable condition.

On the second day after the examination, a long delicate pair of forceps was introduced through the meatus urinarius, with a bistoury at hand to make the proper incision if found to be necessary for the extraction of the stone. By gently and gradually opening the chaps of the forceps, the urethra was sufficiently dilated in about twelve minutes, (with very little pain), to enable me to take hold of the stone. In endeavoring to get a firm grasp, this was crushed to pieces, which I considered a fortunate occurrence; the fragments were removed with the forceps and syringe, at a sitting of a few minutes each day for five days, when no more could be found. Some of the particles passed through the fistula and were washed out of the vagina with a syringe. I weighed four drachms and six grains of gravel saved, and there was fully as much lost. No unpleasant symptom occurred, and she was permitted to walk about, expressing great gratification on account of freedom from pain.

The incontinence was still annoying, and on the sixth day after the removal of the last of the gravel, the speculum was again introduced, and a piece of solid lunar caustic made fast by a thread in the same forceps used for extracting the stone, was carried up through

the speculum into the vesico-vaginal opening, and rubbed on the edges and angle of the wound, until they were completely cauterized. A tube was firmly fixed in the bladder to conduct the urine into a vessel placed below, and emollient injections daily used. On the third day there was tenderness and pain in the pelvic region, fever and bilious vomiting. The catheter was removed, and by the use of the lancet, an emetic, and fomentations, those symptoms were relieved. The catheter was then replaced and not removed until the eighth day, when to my great satisfaction it was found that she could retain the urine and pass it per vias naturales.

Thus has a cure been obtained of a loathsome malady, which at a time still not very remote was supposed to be beyond the resources of art.

I saw Mrs. C., yesterday, and she informed me that she had menstruated three times since the operation without difficulty or pain, but that the menstrual fluid passes from the bladder mingled with the urine, showing, I think, the existence of utero-vesical fistula. Fears are entertained that particles of the menstrual fluid retained in the bladder may form the nucleus of another stone. The woman, however, is contented and happy.—*Western Journal of Medicine and Surgery.*

A Case of Delirium Tremens induced by the inordinate Use of Tobacco. By Wm. A. Gordon, M. D., of Harrisburg, Mo.—Last spring, while on a visit to my relations in the southern part of Kentucky, I met with the following case of delirium tremens. The patient, aged 71 years, had been smoking tobacco to great excess for a number of years. At length, a short time before I saw him, he resolved to abandon the use of it altogether. The day on which he formed this resolution he smoked, in quick succession, nine cigars, which was followed by considerable nausea and giddiness for three days. These symptoms then passed off and his health for a short time seemed better than usual; but after this brief interval he fell into a lethargic state from which he was with difficulty aroused. This condition was succeeded by the symptoms of a true delirium tremens. He was wakeful, agitated, talkative, and alarmed at imaginary objects around his bed. His pulse was about 85 a minute, full but soft; countenance dejected with a wild confused look; skin cold and moist; bowels constipated; tongue moist and slightly coated.

I am not able to report the termination of this singular case, as I left the neighborhood soon after I saw the patient, but as having a physiological interest, I will mention two phenomena which were reported to me in connexion with it.

1st. The patient previous to this attack had been hard of hearing. While laboring under it his hearing became excellent.

2d. He had also labored under some difficulty of speech, for a number of years, owing to what seemed a partial paralysis of the tongue. When the derangement of the cerebral system came on, he

recovered the use of his tongue and was able to speak distinctly and rapidly.—*Ibid.*

Temperature of the Kenhawa Salt Wells.—It has been frequently stated, that the salt wells of Kenhawa do not conform to the law of increasing temperature with descent towards the interior of the earth. A correspondent made a series of observations on this point a few months since, and the result is that the water of those wells is several degrees warmer than that of the springs in the neighborhood. For example, he found the temperature of some of the deepest wells 63 degrees, while the mean temperature of several springs around was 48. The depth of the deepest well was 900 feet.—*Ibid.*

Regulations in the Indiana Medical College.—By the by-laws of this institution, candidates after having passed a satisfactory examination, are required to publicly assent to the following promise before the degree is conferred: "You do solemnly promise that you will, to the utmost of your abilities, exert your influence for promoting the welfare and respectability of the profession: That you will demean yourselves honorably in the practice thereof: That you will not put forth any nostrum or secret method of cure, and that you will not publish any matter or thing derogatory of the profession."—*Western Lancet.*

Remarks on Scurvy as observed in Cumberland, and the Southern parts of Scotland. By Henry Lonsdale, M. D., F. R. C. P. Ed., Physician to the Cumberland Infirmary, &c., &c.

The history of scurvy, interesting to the physician and no less gratifying to the philanthropist, is often cited to show the advantage of well-directed hygiene, and the superiority of modern medicines over that of less favoured times. Though very few practitioners of the present day have seen scurvy, all seem pretty nearly agreed that the disease has its origin in the absence of fresh vegetables, and that a restoration to these, or the free use of fruits of the genus *citrus* of the *aurantiaceæ*, will speedily establish health in scorbutic patients. As medicine is a progressive art, and men are now taught the advantage of viewing things in a broader light, it need not surprise us to see dogmas set aside, and principles, apparently well established, called in question by a wider and more searching philosophy. Much praise is due those who set themselves the noble task of observing disease *de novo*; even when, as in scurvy, history to all appearance had completed its task. I am led to these remarks from a perusal of the opinions published in the last number of this Journal by my esteemed friend and preceptor, Professor Christison, who, not content with the views of approved authors on the subject of scurvy, has attempted a further generalization, or at least introduced some novel and curious facts bearing significantly on any discussion which may hereafter be entered upon in relation to this disease.

During the past winter, and more especially about the beginning

of the present year, I frequently observed amongst the out-patients of the Cumberland Infirmary, and occasionally in those of better circumstances in respect to food and clothing, a deteriorated condition of the system with no very specific, or localizable disease. The parties presented an unhealthy complexion, and complained of great languor, listlessness, and debility, irregular dyspeptic symptoms, diarrhœa, and more frequently dysentery. The legs were sometimes swollen, œdematous and painful, and the most trifling sores were slow to heal. Rheumatic pains were common, and in women of less robust habit menorrhagia was not unfrequent. These and other ailments became associated in my mind with what the older authors would have termed a "cachectic condition."*

Depletives of all kinds could not be borne; tonic medicines on the other hand were in great request, and fulfilled the best indications. On conversing with Mr. Thomas, our active house surgeon, on the prevalence of disease and its peculiarities, during the month of March, he expressed his doubts as to the character of a few cases where the parties complained of contusions, sprained ankles, &c., and gave me reason to apprehend that scurvy had shown itself amongst the applicants for *surgical* relief. At that time I had not seen scurvy, nor did any come under my notice till the 20th of April, when a girl of 18 years of age applied as an out-patient. Three days subsequently, two railway labourers were brought to the infirmary from the "Summit Huts" on the Caledonian Railway, a distance of nearly fifty miles. One of these men, aged forty-three years, rapidly fell a victim to the disease. I abbreviate the house surgeon's report of the case.

His face is swollen—lips livid—ecchymosis about the right eye. Such was his difficulty of breathing, that when carried from the conveyance into the Infirmary, he could not walk above two or three steps. The sounds of the heart were feeble, and a short bruit accompanied the diastole: respiratory sounds, healthy on the anterior and lateral parts of chest, but inaudible behind. This man, who gave but an imperfect account of himself, said he had been able to work until about a fortnight ago, when his illness commenced with difficult breathing and swelled legs. After being placed in bed his breathing became more and more embarrassed, and he died six hours after admission.

A *post-mortem* examination of the body, eighteen hours after death, shewed effused blood in the muscles of the abdomen, and along the course of the veins at the lower part of the neck: there were also

*It may be well to mention here, that disease has been much more common than usual amongst cattle in the neighbourhood of Carlisle, and, as in the human subject, much less amenable to treatment. Veterinarians have not been able to specify the nature of the epidemic, beyond mentioning the great frequency of *Pleuropneumonia*. As far as I can learn, the "bleeding plan" which ought to obviate pneumonic disease is losing credit, and not a few of the sensible class of farmers, seeing the fallability of the art, eschew physic entirely, and commit their animals to the more tender mercies of nature. It seems pretty certain, however, that the cause of disease amongst the brute creation is not as yet traced to any error in food, whilst the prevailing opinion is in favour of atmospheric influence aiding, if not originating morbid action.

patches of ecchymoses over the convexity of the transverse colon; but these and incipient granular degeneration of the kidneys were the only morbid appearances. The state of the gums and the knee-joints, and a more detailed history from his companion, proved his disease to have been scurvy. The long journey and great exertion were more than his debilitated system could bear up against,—hence the suddenly fatal termination.

My attention was now fully awakened to the subject, and the continual accession of cases from the Caledonian Railway, and out-door applicants in the persons of laborers, shoemakers, weavers, factory-girls, &c., afforded ample scope for investigating the disease in all its relations. I was fortunate also to secure the co-operation of medical friends in the neighbouring towns and rural districts, only two of whom had seen scurvy previously, and some of them naturally had their doubts as to the supervention of a disease which ranked rather amongst "the things that were," in the eyes of landsmen.

So much has been written on the history of scurvy, that I do not feel myself justified in doing more than state that the symptoms presented the true features of Scorbutus, or Sea-Scurvy, such as have been already given in the June number of this journal, p. 878. As worthy of notice I may mention, that hemorrhage was common from the gums. Epistaxes was less frequent. In two cases blood was passed *per anum*, and in one case, but only in trifling quantity, from the bladder. A tendency to menorrhagia was also observed. The stiffness of the joints completely disabled a large number from walking, whilst pains in the joints were at times unusually severe. The embarrassed breathing on the slightest exertion does not seem to have been so particularly noticed on the present epidemic. It was well marked in the severe cases which came under my observation, and to show how rapidly it was induced, a patient in bed attempting to lay hold of an object rather beyond his reach, had a fit of difficult breathing, which lasted an hour and a half. There was nothing abnormal in the respiratory sounds in any of the cases. The urine occasionally showed uric acid. It was difficult to say whether the gums or limbs were first affected.

These remarks are meant to embrace a general survey of what has been observed of scurvy, in a district presenting very varied circumstances in reference to the locality and dwellings, no less than the occupation and living of the individuals affected. What can present a greater contrast in the artizanship of life than the hand-loom weaver of pallid complexion and slender frame, worried with a large family, ill-fed and worse clothed, following his trade in low confined apartments, often in close proximity to noxious animal effluvia, and the railway-labourer, active, athletic, iron-framed, generally without a wedded charge, and the "little responsibilities," well fed, and warmly clothed, and with his avocations inhaling the "incense-breathing morn!" These men may be almost viewed in the light of antipodes to each other in this life of labour; yet they appear to suffer equally from

any infringment of that law which points out variety of food as essential to the maintenance of healthy action in the human economy.

To make these remarks as concise as possible, it seems advisable to arrange in different groups the persons affected, treating of the prominent facts in each group, *e. g.* the habits and food previous to the attack, the duration of the disease, and the result of medicinal agents employed in the treatment.

It is by no means an easy matter to arrive at correct data regarding the exact quantity of food used by any class of people, whilst those who depend upon manual labour for their subsistence, will naturally in periods of scarcity be obliged to make the kind and quality subservient to their means.

In Carlisle and its immediate vicinity, the persons chiefly afflicted were weavers, and their wives and daughters, working in the factories, shoemakers, and comparatively few of any other class of artizans. They lived in inferior dwellings, complained of the severity of the winter, want of clothing, and short allowances of food. Bread, oatmeal, treacle in very small quantities, tea and coffee with an occasional herring, formed their entire food. None had tasted potatoes after the harvest of 1846, or for a period of seven or more months, excepting one who remembered Christmas day, from the fact of potatoes forming his principal meal on that festival of the Catholic Church.* The bread was variable in quantity, but never exceeded the demands of the appetite,—in short their food was deficient in quantity, miserably so in variety, and altogether incompatible with the maintenance of vigorous health and strength. Few had made use of milk to any extent, even in the most favourable circumstances for obtaining it, whilst the majority said they had no liking for milk, or that it did not suit them. I was particularly careful in my inquiries on this subject, and from my knowledge of the kind of diet generally adopted by this class of people, the information obtained did not appear remarkable. The lower classes here do not sufficiently appreciate the value of milk, viewing it rather in the light of a drink or vehicle for solid food, and therefore too expensive, except in the rearing of children. On being closely questioned as to the cause of their ailments, not a few adduced a "different living," the want of animal food, but the most striking circumstances in their diet was the want of potatoes, which had been the staple food at dinner, and often at supper. The deficient supply of this esculent had been manifest for two years previous, but never entirely failed till the last season. It therefore became less a matter of surprise that the more intelligent of our patients attributed their unhealthy state to a deficiency of the potato crop. Before offering any decided opinion on this subject, let me remark, that women debilitated with suckling, or of a menorrhagic tendency,—people of

*St. Jerome and the early Fathers might have anathematized the person guilty of such gastronomical remembrance of a holy festivity; in our days, however, the "dignitaries of the Church" appreciate too highly the

"Fair round belly with good capon lined,"

to interfere with the *stomachic* privileges of her majesty's lieges.

both sexes suffering from sores and burns, or who had taken two or three doses of mercury, or laboured under disease which enfeebled the constitution, seemed peculiarly liable to the inroads of scorbutus. Whatever lessened the vital power, developed or hastened on the disease.

This cannot be said of the railway excavators, who in general lived on beef or mutton, salt bacon, suet puddings, bread and butter, oatmeal porridge and treacle, tea and coffee, and occasionally potations of ale or beer. The exact quantities devoured by these muscular fellows could not be ascertained, but that there was no deficiency of the food used is pretty evident from their repeated statements. A personal inspection* of their breakfast and dinner tables enabled me to verify these statements. They assured me that they often consumed a pound of beef at a meal.

The barren mountainous country through which the Caledonian Railway passes for a long distance, precludes the purchase of milk during any part of the year, whilst in the more cultivated districts from Lockerbie southwards, the supply is so scanty that it can hardly be viewed as forming part of the dietary of the excavators.

On questioning these men as to their fondness for, or use of milk, during periods antecedent to their being engaged on this line, I learned that none had been in the habit of using it for the last five years, or so rarely as not to be noticed in any inquiry *quoad* their food. A majority of these excavators were Englishmen belonging to the northern counties. As they constituted a large body of men foreign to the district in which they carried on their labours, the farmers did not consider it politic to increase their stock of cows for a temporary purpose, moreover the rural population were generally intimidated by the outrageous behaviour of these workmen, and did not solicit their favours. Taking these circumstances into consideration, it is reasonable to infer that the quantity of milk consumed by these people was of very small amount. The replies elicited by my repeated questioning confirmed the above view; and the report of Dr. Smith and Mr. Cockburn, of Moffat, is to the same effect. Mr. C. writes, "few of those affected have been in the habit of using milk."

In the most southern part of Dumfriesshire, the Gretna district, scurvy has been very prevalent since January; indeed, I believe that

*I visited the numerous huts from Moffat to the "summit" on Sunday the 2d May, along with Messrs. Thomas and Cockburn. In a great number of the huts we saw the men breakfasting on beefsteaks or mutton chops and bread. The dinner comprised bread, boiled beef, or bacon, pea soup or broth, and suet puddings containing currants. The animal food was taken in large quantities, though the men had not had the benefit of labour or exercise (owing to the day and the heavy rains,) to improve the appetite. I occasionally found the bread stale, and the butter rancid; the "tommy shops" were heavily complained of. The uncooked beef and mutton seemed good, perhaps less fat than usual. The sleeping apartments were much too small, ceilings low, and ventilation imperfect.

The site of the huts was not well chosen, either they were too near the "Avon stream," or on mossy wet soil. In the last mentioned sites, fever made greatest ravages.

here it showed itself sooner than in any part of the wide locality referred to in these remarks. Here the farms are large, and agriculture is conducted with great skill. The land is not much above the level of the high-water mark of the Solway Firth, as it runs up the "Kirtle" and "Sark" rivers. The villages of Gretna, Springfield, and the Rigg of Gretna, are closed to the English borders, and consist of a few straggling houses, inhabited mainly by weavers and field labourers.

In this, as in all rural districts, the farm-servants and cottars have milk twice a day at least, but the other division of the labouring population, the artisans and families, are not favoured with milk beyond the summer and autumnal months; the rest of the year they use treacle-beer to their porridge. In this district, through the kindness of Mr. Carruthers, surgeon, I had the opportunity of observing well-marked cases in both sexes, in cottars who were in the habit of taking milk daily, to the extent of from 10 to 32 ounces; and in artizans, who were obliged to use treacle-beer in lieu of milk for eight months in the year. Mr. Carruthers informed me that potatoes have always formed a staple article of food in this district, comparative little animal food being used, fresh fish and salt bacon occasionally. Oatmeal in various forms is daily consumed. During three winters the potato crop has been failing, but the supply was never entirely cut off till last autumn and winter. In the case of milk there had been no manifest deficiency. Here then, in the Gretna district, a number of people, pretty nearly 100 in all, who, in respect to locality, dwellings, and labour, were the same in 1846–7 that they had been for years previously; but being deprived of that which had long occupied a prominent position in their diet, namely the potatoes, could no longer withstand that breaking down of the constitution which terminated in scurvy. Had the artizan classes been alone affected they would have afforded a strong confirmation of the opinion so ably advocated by Christison; but the fact of many of the agricultural class, who were daily in the habit of using milk, being equally diseased, makes the cause, if an error of diet, (and there is no other apparent cause,) to rest with the potatoes. The following cases may be cited as additional instances to those recorded above. A gentleman of middle age, highly distinguished for his agricultural attainments, who had not used milk for more than twenty years, became afraid, in September last, of eating potatoes, of which esculent he was formerly fond, lest it should induce disease, and suddenly attached himself to cocoa, arrow-root, and other farinacious food,—the quantity in all being deficient for the healthy standard. In April 1847 scorbutic symptoms appeared, and I prescribed for him oranges, beef tea, and a more liberal allowance of food generally. He was restored to health in a fortnight. A clergman in the same vicinity was also afraid of using the potatoes last autumn. His living in other respects was the same as in other years. He became scorbutic about the latter end of April last.

A sailor in the light-ship off Maryport, on the west coast, placed

himself under my care in May. He had not tasted fresh vegetables for more than eight months. In other respects his food was the same last year as it had been for four years previously, during which period he had been a strong healthy person.

An agricultural labourer who abandoned potatoes entirely in August, 1846, continuing his small quantities of milk, and the saccharo-farinaceous food so often alluded to, became so severely affected with scurvy, that he could not be raised to be shaved without fainting; his death was daily expected. Can anything be more striking than these cases, exhibiting the cause of the disease?

Dr. John Graham, of Brampton, nine miles east from Carlisle, reports of his cases of scurvy, "the most general fact respecting the diet is the total want of potatoes and fresh vegetables—then comes the total absence of fresh animal food—salt herrings and bacon being the only substitute for it." Again he says, "It appears that the patients, all of whom were paupers, had in former years had potatoes, and though not accustomed to much milk, the quantity not exceeding three or four ounces daily, had generally more than during last season." In a third of Dr. G.'s cases no milk had been taken for two or more years.

Dr. George Mein describes the food of the scorbutics in Cannobie, a rural district near the English borders, as consisting of tea, coffee, porridge, bread and butter, no meat and no vegetables. The frost had spoiled the turnips and cabbages. Milk he reports to be "scarce every winter in Cannobie." Dr. Weir, an old practitioner in the district, does not think the supply of milk differed at all from ordinary years, and attributes the cause of scurvy to the want of the potato and other fresh vegetables.

Dr. Bogie of Annan, Dumfriesshire, has seen between 90 and 100 cases amongst the pauper class, and railway excavators on the Nithsdale Railway. He had previously seen the disease on board of ships. In reference to the present epidemic, he informs me that he "could trace no connexion between milk and the disease." A number, but the proportion he could not specify, made use of milk in the summer months. The food appears to have been very similar to that recorded above, namely, saccharo-farinaceous; the absence of potatoes and fresh vegetables being very prominent. Dr. Bogie describes the pulse as very languid, and "never emptying itself," and that mercury with chalk improved the pulse by relieving the hepatic circulation and producing bilious stools. Contrary to the experience of writers, he found the physiological action of the mercury necessary, in some cases, where nutritious food, and his favourite remedy,—salicin (10 or 12 grains daily,)—had failed in their ordinary beneficial effects in this disease.

The average duration of the disease under salicin and nutritious diet was rather more than a month.

Dr. Walker of Annan had treated a dozen cases. He attributes the disease to the want of potatoes and fresh vegetables.

My highly esteemed friend, Dr. Dickinson, who has had more ex-

perience of scurvy than any one in Cumberland, reports that the disease had not shown itself in Workington (a seaport town of 7000 inhabitants on the west coast,) and assigns as a reason, "that vegetable food was more abundant there than in many situations, particularly turnips, of which large quantities were used."

A few days ago, my talented friend, Dr. Browne, Crichton Institution, Dumfries, told me in conversation, that he had scorbutic cases generally every spring, and that during the present season the disease had been much more common, in all probability, from the want of fresh vegetables, as the parties were not without a fair supply of milk. Dr. Grieve, who joined us in conversation, could not trace any connexion between milk and the disease in his abundant experience of scurvy as now prevailing in Dumfries. Both gentlemen agree as to the absence of potatoes being the chief cause, whilst they were inclined to attribute something to atmospheric or other influences which a more extended experience may unravel.

Though the diet of the scorbutics under my care has been fully considered, it is right to state, in reference to Carlisle and its vicinity, that milk was not quite so abundant amongst the poor in the early part of winter, owing not so much to the diminution of supply occasioned by diseased cattle, or lack of fodder, as the fact of provisions generally being almost double the price of ordinary years, thus compelling the adoption of weak tea and coffee. In former years, for instance 1842–3, &c., the "murrain" was common, and milk was then more scarce, and abandoned by many lest it should induce the same disease in the human system,* yet there was no approach to scurvy during that scarcity of milk. It is, indeed, a striking fact, as an intelligent medical friend writes, "that of all the years under the sun, that marked by a dearth of potatoes should be chosen for the advent of scurvy," and, I may add, amongst a class hitherto considered exempt from its attacks. Whilst this clearly points out something else than the want of milk as the *origo mali* of the present epidemic, I am in no wise doubtful, but a copious supply of this bland nourishment would be, in many cases, a useful antiscorbutic, owing to its possessing *per se* those proximate principles proved by Prout, and others, so essential to nutrition.† And I can fully comprehend its great services in turning the tide in favour of health, when a previous diet had been

*It deserves remark, that the poor are always more prejudiced against doubtful articles of diet than those in more easy circumstances. The cry against "murrain milk" was strong during the period. During the present spring it required great and persevering efforts to persuade the starving hundreds to adopt the use of rice, hominy and other substitutes for potatoes.

†There must be *something* in the potatoes; they enable Irishmen to do a great amount of work. Paddy pays us an annual visit in the harvest, and prefers a "potful o' praties" to the best roast beef which we can set before him. Butter-milk is very well in its way, but we dont churn butter every day of the week. Don't boil the potato to affect the centre much, and Pat will tell you that the "hard mate" and a pickle of salt, "barring the milk," will do "rite well."

Let chemists look to this. The "heart of a potato" may make an English Liebig of some enterprising fellow.

faulty, either in variety, as seen at Perth, or quantity, as too often met with during last season.

Treatment.—I have already spoken of the severity of the cases under my care in the Infirmary, and may further add that not one of them was able to chew animal food, or even soft bread, in addition to their being incapacitated from walking from one room to another. Their appetites were good. They were ordered a pint of beef-tea, a pint of porter, 12 oz. of bread, and the same quantity of milk *per diem*, also ʒi or ʒij of citric acid and lemon-juice with 4 oz. of infusion of gentian and water as an acid drink. They soaked the bread in the beef-tea, and relished the bitter infusion and acid drink amazingly. The worst cases had two oranges daily. Nothing in medicine has delighted me so much as witnessing the happy effects of this plan of treatment. Four excavators were placed in a ward by themselves, labouring under scurvy in the most severe form. On the third day after admission, these fellows began to speak in a cheerful tone. Hemorrhage from the gums had ceased, the joints were less painful and less swollen, and no fresh ecchymoses had shown themselves. On the sixth day, the gums enabled them to chew, and other ameliorations had gone on *pari passu* with the gums. On the ninth day they were all sitting up, and enabled to walk along the room; and on the 12th they became useful in cleaning the walks; and on the 14th day, presented themselves to the committee of the institution, and returned thanks for what one of them, the spokesman of the party, chose to call "a miracle effected on them." The weavers did not make such great progress under the same treatment:—from 20 to 26 days being required to effect a cure in them. The excavator, who accompanied the fatal case, remained in the house 40 days. His diet had been no better than the poorest of our scorbutics, and he was not of the most healthy character.

The average duration of the out-patients to whom an abundant supply of the citric acid and gentian mixture was given, and who dieted as they best could of fresh vegetables, was about 25 days. The smallest alteration of diet had a wonderful influence in checking the disease, so that I am not surprised at the accounts given by Lind, of a "few pickled cabbages now and then" affording immunity from the disease. Those who obtained oranges advanced most rapidly. So much was I convinced of the value of oranges, that on being called to an excavator who had lost more than three pints of blood by epistaxis in less than three hours, and was reduced to extreme weakness both in body and mind, I prescribed oranges *ad libitum*. He was badly nursed, and got weak broth, and little farinaceous food, but his recovery was complete within the twenty days. A woman less severely affected than the majority, was cured with a shilling's worth, about 15 oranges! The lightship sailor who came to me on crutches got well on oranges in 14 days. The agricultural labourer, who could not have his head raised without fainting, was cured with oranges and porter, and citric acid, small quantities of each, in about 15 days.

He was "the miracle" of the district in which he lived, as his friends had given him up for lost.

In the list of treatment adopted by others, I see the mineral and vegetable acids, bark, wine, beef-tea, milk, occasional purgatives and diaphoretics, oranges, potatoes, &c. It is often noted by my obliging friends that the scorbutics only had a few potatoes, or fresh vegetables, or milk, and soon rallied; even a good supply of nettle broth or beer cured slight cases; again and again showing that the slightest change of diet or drink was beneficial, and that in proportion to the nutritious quantity of the food along with variety, was the rapidity of the cure.

As vegetables became plentiful, scurvy disappeared from amongst us. I do not hear of fresh cases anywhere in Cumberland at this date (July 9th.)

Conclusion.—On weighing all the circumstances related above, I am led to make the following inferences. 1. That as the vegetable world became more or less blighted, man in common with the higher class of animals suffered, from causes not well understood, but apparently of an epidemic nature, which have deteriorated his condition, and made him the more ready victim to scurvy, fever, &c. 2. That scurvy originates from an error of diet as generally believed,—the occupation, dwellings, &c., sometimes viewed as collateral causes having little or no influence. 3. That a deficiency of potatoes constitutes the chief error of diet, and is the main cause of the present epidemic, whilst the absence of variety and deficient quantity of food hastened the development of scurvy. 4. That the use of milk, as might be anticipated from its proximate principles, lessened the liability to scurvy, but did not prevent its occurrence:—its powers in correcting a monotonous diet have been acknowledged in the list of remedial agents.

P. S.—The present epidemic of scurvy contains a warning, which concerns the government, the profession, and the public. Let us hope that it will not be lost sight of.—*Monthly Journal of Med Sci.*

Functions of the Spinal Cord.—Some curious results have been afforded by an ingenious set of experiments performed by M. Brown-Séquard for ascertaining the degree of motor power left in the spinal cord after separation from the brain, compared with the power which can be exerted while its connection with the brain is left uninjured. The process which he employed for ascertaining this consisted in suspending from the extremity of one of the posterior limbs of a frog a light weight, sufficient to keep the limb stretched; and then pinching one of the toes, whereupon flexion of the limb with its attached weight was excited. By increasing the suspended weight until it amounted to more than the animal by its attempts at flexion of the limb could move, a tolerable correct estimate might be formed of the degree of voluntary motor power the frog was capable of exerting. Having determined this, he divided the spinal cord below the origin of the second pair of nerves, and then observed the effect which such division had on the motor power of the limb. Immediately after the division, he finds that sometimes the motor power is

for the time quite lost, although there generally remains about one-quarter or one-third of what there was before the operation; at other times there is left about one half, or even, though very rarely, as much as two-thirds. A frog, for example, which before the operation could raise a weight amounting to 60 grammes, would not be able immediately after it, to raise any weight at all, or one amounting to 10, 20, 30, or 40 grammes, but not so much as 60 grammes. In five minutes after the operation the motor power is sensibly increased, and usually amounts to one-third, one half, or even two-thirds of its original amount. In fifteen minutes it has increased still more; and in from twenty to twenty-five minutes generally amounts to what it was before the operation. In an hour after the operation its original amount is sometimes doubled, and in two or three hours it is often trebled. Arrived at this degree, the motor power appears to cease from further increase, though sometimes it does not attain this, which may be regarded as its maximum, until twenty-four hours after the operation; and sometimes it is two or three days in attaining it: but in all such cases, the increase is very slow after the first few hours succeeding the operation. When once attained, the maximum motor force remains stationary for five, ten, fifteen, or twenty days, and then gradually diminishes. If the frog survives the operation for some months, the motor force is reduced lower than it was before the operation. But probably if the animals were nourished, and if movements of the hind limbs were frequently excited, this diminution would not take place,—or, at any rate, not to so great an extent.—*London Med. Gaz., from Comptes Rendus.*

Asiatic Cholera.—The Indian mail, just arrived, announces, in letters from Dinapore, that the cholera was ravaging her Majesty's 98th Regiment; 64 persons died in the month of May; there were 170 in the hospital daily. According to recent intelligence, published in the Gazette of Augsburg, the Asiatic cholera was still prevailing at Tiflis, where it has occasioned many deaths.—*Ibid.*

Fulminating Mannite.—That peculiar kind of sugar which is obtained from manna, and which gives the sweet flavor to celery and asparagus, has been lately converted by M. Sobrero into a highly fulminating compound. Although the process is not published, there is no doubt that, like fulminating cotton, the conversion is effected by the agency of sulphuric and nitric acids. It detonates by percussion as violently as fulminating mercury, and produces, during explosion, sufficient heat to ignite gunpowder. M. Sobrero has employed it as a substitute for fulminating mercury in percussion-caps. He found that a small quantity of mannite, crystallized from alcohol, and thus employed, discharged a gun as effectually as if fulminating mercury had been used. Further experiments are, however, required to show whether the mannite can be safely and economically substituted for mercury in the manufacture of percussion-caps.—*Ibid.*

A Preservative against Syphilis.—It is announced in a late number of *L'Union Médicale*, that a M. Debrosse professes to have discovered a method of preservation against attacks of syphilis. The inventor states "that any part plunged for five minutes in the prophylactic liquid may be exposed with impunity to the contact of mucous membrane impregnated with the virus of syphilis." A mercantile house has made a proposition to the Government of Spain on the subject; and it has been so far seriously entertained that the Government has referred the question to the decision of the Academy of Medicine and Surgery of New Castle. While the discussion was proceeding, (with closed doors,) a Dr. Lafond, of Bayonne, accompanied by a member of the commercial house in question, appeared before the Academy, and read a memoir on the success which had attended the use of Debrosse's liquid, stating that it was an astringent preparation. A committee was therefore appointed to inquire into the matter, and according to the latest intelligence, the members of this committee were busily engaged in carrying out their investigations on this curious subject.—*Ibid, from L'Union Médicale.*

Alleged Rape perpetrated on a Female while under the influence of Ether.—That which had been suspected as a probable result, on the introduction of a new narcotizing agent, has, according to the *Gazette Médicale*, actually occurred in Paris. Last week a female went to a dentist to have a tooth extracted. He advised that it should be stopped; and, to avoid the pain of the operation, recommended his patient to inhale the vapour of ether. What passed while the female was under the influence of the vapour may be inferred from the following facts:—The young female was observed to leave the dentist's house about three hours after she had entered it, in a very disordered state. This attracted the attention of her employer, who could not account for her long absence. The injured party, notwithstanding the stupefying effects of the ether, retained some recollection of what had passed, and, from some words which fell from her, suspicion was immediately excited. She was examined by a physician, who reported that her person had been violated. The dentist has been arrested, and is about to be prosecuted for the offence.—*Ibid, from Gaz. Méd.*

A new cure for Nervous Affections.—M. Pallas considers that the cause of a great number of "nervous affections" is to be found in the excessive influence of atmospheric or terrestrial electricity. He states that, by adapting to bedsteads glass feet, and isolating them at about eighteen inches from the wall of the apartment, he has cured the patients sleeping upon them of a host of nervous affections.

The impression produced on the mind has probably as powerful an influence in the cure as the insulation on glass.—*Ibid.*

Statistics of Suicides in Paris.—By a criminal report, for the year 1845, just published, out of 11,049 deaths, there were 3084 cases of

suicide,—being 111 above above the number for 1844, and only 64 above that of 1843. Of the 3084 suicides, there were 2332 males and 725 females. Sixteen males and four females had not reached their sixteenth year. Among the number were children of 7, 8, and 10 years. There were—

From 16 to 21 years	123
From 21 to 30 "	362
From 30 to 50 "	1201
From 50 to 70 "	945
From 70 to 80 "	203
More than 80 "	41

Taking the months of the year, there were of suicides in

Summer.—June July, and August	922
Spring.—March, April, and May	861
Autumn.—Sept., Oct., and Nov.	756
Winter.—Dec., Jan., and February	545

According to the means of perpetration, there were—

By hanging	1110
" drowning	995
" fire-arms	432
" suffocation by charcoal vapour	213

The last mode of self-destruction is exceedingly prevalent in the department of the Seine.

The motives were those usually met with—love, jealousy, debauchery, reverse of fortune, domestic misery, and physical suffering. —*Ibid, from Ibid.*

Action of Ether injected into the Arteries.—According to the experiments of M. Flourens, it would appear that ether, when injected into the blood-vessels, has an inverse effect to that observed after the inhalation of the fluid. When inhaled, ether suspends sensation before it interferes with the power of motion; but, when injected into the arteries, M. Flourens found that it destroyed the power of motion previously to exerting any influence on sensation: indeed, sensation remains unaffected, unless the quantity of ether employed is very large.—*Ibid, from Gaz. des Hôpitaux.*

ACADEMY OF SCIENCES.

Composition of the Blood in Scurvy.—M. Marshal de Calvi, in an essay upon this subject, acknowledged the truth of Professor Andral's observation, that the quantity of fibrin might not be diminished in the blood of scorbutic patients, but accounted for the fact by the inflammatory condition generated in the circulating fluid by the efforts necessary for the resorption of extravasated blood. The singular coincidents of the diminution of albumen and of globulin, with the absence of dropsical effusion or of murmurs in the heart and arteries, M. Marshall explained by the difference which muse exist between diminution of the power of creating albumen in the blood, and genuine decrease or destruction of the component principle.

Treatment of Cancer.—M. Rivaillé read a paper on the use of caustics for the treatment of cancer. In a general manner Dr. Rivaillé stated that caustics were preferable to the removal of these tumours with the knife. Concentrated nitric acid had yielded him in his practice most advantageous results. Poured over a pledget of lint, it constituted with the latter a semi-solid cake, which moulded itself to the shape of subjacent parts, and effectually prevented hemorrhage. It was particularly in fungous tumours disposed to this accident that M. Rivaillé had found nitric acid useful as a local application. M. Rivaillé also in many instances employed alum for the purpose of arresting the progress of hospital gangrene.

Spontaneous Dislocation of the Knee.—M. Palasciano forwarded a communication, in which he endeavoured to establish—first, that the muscle known as "tensor vaginæ femoris" did not deserve that name, but, being inserted by long tendinous fibres to the external condyle of the tibia, its use was to rotate the leg outwards, and to abduct the knee when it is bent. Starting from these anatomical data, M. Palasciano observed that the spontaneous dislocation of the knee was a complicated affection, constituted by the flexion, rotation, and abduction of the knee; displacement of the tibia backwards, of the patella outwards, and often with more or less complete ankylosis. In order to cure this disease, which had hitherto been erroneously considered as irremediable, M. Palasciano proposed the section of the flexor tendons, of that of the rotator externus (tensor v. f.,) of the rectus femoris, and vastus externus, also the division of the external lateral ligaments of the joint: preliminary operations which would permit the rupture of the ankylosis and the surgical reduction of the limb to its natural direction.—*Medical Times.*

Diarrhœa of Children.—The diarrhœa which accompanies or follows the period of weaning is often fatal; it is not only observable in children who are suddenly deprived of the breast, but also in those who are nursed for too long a period. Dr. Weisse, physician to the Children's Hospital in St. Petersburg, advises the exhibition of raw meat in such cases, and asserts that he has from this practice often derived the most signal advantages. The meat should be hashed, or reduced into a pulp, and two table-spoonfuls may be at first given in four meals.—*Med. Times, from Annales de la Société Med. Chir. de Bruges.*

Burnett's Disinfecting Fluid.—The chloride of zinc in solution, it appears from a parliamentary document which has just been issued, has been employed extensively as a disinfectant in dissecting-rooms, the wards of hospitals, and in the royal navy, and, according to the reports which we have seen, has been eminently successful in effecting the objects for which it is designed. The medical officers at Haslar Hospital state that it has been used in that hospital in the close stools of patients affected with dysentery, in the water-closets

and cesspools, and also in the wards, when the air was tainted by purulent expectoration or discharge from sores, with the effect of immediately removing the disagreeable odours. It has also been used in surgery with good effect, in removing the smell of putrefying animal substances, and the odour of dead bodies under inspection: when employed as a dressing to ulcers, it removes the disagreeable smell of purulent matter, and, in the proportion of one part of the clear solution to eighteen of water, it preserves subjects of natural history from putrefaction, and in a fit state of anatomical inspection, after more than a year has elapsed. A similar testimony in favour of the solution of the chloride, is borne by the assistant surgeon of the Marine Hospital at Woolwich, who adds, "the great advantage which the chloride of zinc possesses over other agents employed for a like purpose, is, that it removes the disagreeable effluvium, without leaving one little less offensive in its room, and may therefore be made use of wherever this effect is required—in private as well as public buildings, in the sick bed chamber no less than in the crowded ward. The method adopted at this hospital is to supply each of the wards with a bottle of the diluted solution, which the nurses have directions to use whenever occasion may require, besides sprinkling it over the floors before the morning and evening visits are made.

Its utility in the dissecting-room is confirmed by the statements made by Mr. Bowman, Dr. Sharpey, Mr. Partridge, Dr. Murray, and Dr. V. Pettigrew, who concur in asserting, that in a proper degree of dilution its success is complete, and that it appears to preserve the colour and texture of the parts very admirably. It has, further, the very important advantage of not acting on the steel instruments employed, being in this respect equal to alcohol. Dr. Methven especially mentions an instance in which the solution corrected advancing putrescence, and enabled him to dissect during July. He believes, further, it will be the means of saving many valuable lives, which are annually lost by wounds received in the course of dissection, as, while dissecting this putrid body, he cut himself several times, and once received a punctured wound, without any bad consequences arising. Mr. M'Bain, of the "Mastiff," adds his testimony "to the rapid and perfect effects of the chloride of zinc solution upon animal matter in a state of putrefaction. Having frequently opportunities of dissecting or examining large fish, &c., cast on shore, whilst undergoing decomposition, the task has been occasionally any thing but agreeable, for want of a convenient power to destroy the putrefactive process. The chloride in these cases acts like magic; and as a great practical agent over one of the most import conditions of animal and vegetable matter—viz: putrefaction, it stands unrivalled." Its influence on board ship, in annihilating the offensive smell of bilge-water, and in sweetening between decks, is shown by the united evidence of captains, surgeons, and masters in the royal navy. Among other vessels, it was used on board the "Victoria and Albert" royal yacht, to remove a more than ordinary stench of bilge-water, and other offensive odours, with the most complete success. The surgeon

states that she has remained comparatively sweet ever since, and when a bilge-water smell is occasionally perceptible, a slight application of the fluid removes it. The solution has also been used for very disgusting privies, &c., effluvia from which, it quickly neutralizes.

Mr. Henderson, the surgeon to the dock-yard at Portsmouth, has employed the fluid in a severe case of open cancer, the fœtor from which was intolerable to the patient and attendants: this it destroyed so long as the dressings were kept moist therewith. Professor Quain has used it, he says, in the treatment of sloughing tumours with beneficial result, and he has no doubt it will supplant the chloride of lime and soda altogether in the removal of fœtid odour. Mr. Gibson, surgeon of the "Eurydice," employed it in a case of angry ulcer, in the proportion of one part to four of water. An eschar was the result, the separation of which left the ulcer in a healthy condition.

Several naval and other medical men have employed it as a disinfectant in hospitals, and on board ship, the general results being a marked diminution in the rate of mortality. Dr. Lindsay, Dr. Cronin, and Dr. Connor, of Cork, all bear testimony to its beneficial effects. Mr. Verling, surgeon of the "Vengeance," thus speaks:—

"Having used the chloride of zinc rather extensively on board Her Majesty's ship 'Vengeance,' whilst employed in the conveyance of troops, I think proper to report to you the result thereof. We carried the first battalion of the forty-second regiment, consisting of about 700 men, women, and children, from Malta to Bermuda. Measles had prevailed epidemically in the regiment previously to their embarkation, but we received none on board labouring under the disease; yet after being ten days at sea, several cases occurred simultaneously among the soldiers, and on the 1st of April, having been then a month at sea, the disease appeared among our own people, ten cases occurring on that day, and from that day to the fifteenth of the month, when we arrived at Bermuda, fresh cases were almost of daily occurrence, either among our own people or the troops. On getting rid of the troops, which we did at Bermuda, my attention was of course specially directed to every means whereby the contagion could be destroyed. Cleanliness and ventilation were duly attended to, and every part of the ship where the sick had been, after being cleaned and aired, was spongéd well over with the solution of chloride of zinc several times. Than the result, nothing could be better; the disease totally ceased, no fresh case occurring after. On our passage from Halifax, with the sixtieth regiment on board, the weather was so bad, and the ship working so much, that it was quite impossible to open any of the lower-deck ports, on which deck the whole of the people lived, troops as well as our own people, for eight days; the air throughout the deck was exceedingly vitiated with every mixture of noxious smell, but the free use of the chloride of zinc tended, in a most surprising manner, to do away with the bad smell; so much so, that the surgeon of the regiment came to me to get some to use in the part of the ship where the ladies of the officers were.

The effect of the chloride of zinc is most obvious in correcting all bad and offensive effluvia; and from the sudden and surprising manner in which the measles disappeared after its use, it is not, I think, too much to say, that it must have been very instrumental in decomposing the miasma, or state of atmosphere in the ship, which tended to the generation of the disease."

From all these statements, then, it is clear that the solution of the chloride of zinc is a powerful agent in neutralizing noxious gases, and in arresting the progress of decomposition. Sir W. Burnett has therefore rendered, by its discovery, a great benefit to suffering humanity. On board ship, its influence in removing the offensive odours from bilge-water can hardly be too highly estimated, while its action in sweetening the wards of hospitals, and destroying noxious and infectious effluvia, seems to be equally evident.—*London Lancet.*

MEDICAL SOCIETY OF LONDON.

Dr. Marshall Hall read a paper on the *Convulsive Affections of Infants and Children.*

The author began by alluding to the dangers attendant on infantile convulsions, to its consequences to mind, limb, and life, and to the possibility of idiocy, or liability to epilepsy, being its result. He then made reference to the causes, forms, and effects of such convulsions, and the mode by which they are induced; and then proceeded more particularly to consider them. He dwelt especially on—

1. *The terms employed* to designate certain forms and symptoms of them; and on one especially, laryngismus stridulus, which the author contended was no more a disease than cough was a disease, or "any other symptom of disease was a distinct disease." He said, that laryngismus was not always stridulous, but depended on the same causes, whether it was or was not so; the most dangerous forms of it were those which were noiseless. He would associate this symptom, which was certainly one of great peculiarity and danger often, with contraction of the hand, which he would call chirismus, and with that of the foot, which he would style podismus; the term sphincterismus, too, might be applied to spasm of the sphincter ani, or neck of the bladder. "Let the termination in *ismus* be used only to designate a symptom, and that of a purely nervous or convulsive character."

2. *The predisposition* to convulsive affections, and laryngismus more especially, was very marked. The latter had been known to affect a whole family. The cause of such predisposition is obscure: was it hereditary? was it the effect of locality, or emanations from the soil?

3. *The causes.*—No irritation of the cerebrum or cerebellum could *immediately* produce muscular spasm, as experiment had shown again and again. But irritation of the membranes of the brain might excite it, as appeared from an experiment which he had performed, and recently detailed. Irritation of the medulla oblongata, or medulla

spinalis, produced the most frightful spasms. The incident nerves, when affected at their origin in the cutaneous, mucous, or other tissues, were the most frequent source of the attacks. The condition of the gums in teething, gastric or intestinal disorder; matters retained in the lower part of the alimentary canal; the atmosphere itself, especially when north, east, or north-east winds prevailed; perhaps certain vapours;—these were all insisted on as being intimately connected with the production of convulsion, or that form of it called laryngismus. Strabismus, or the spasmodic condition of the hand or foot, might arise from teething, &c.; but the larynx was very apt to be affected by the north or east winds, or other conditions of the atmosphere. He also associated laryngismus stridulus with undue excitability of the spinal centre: when it seemed got rid of, it was very apt to recur. Hence the precaution of persevering with remedies longer than would otherwise be necessary.

4. *The influence of sleep.*—He alluded to the frequent occurrence of convulsions at this period, chiefly epilepsy. There was congestion of the nervous centres then; probably unusual excitability of them. Altogether, it produced a state favourable to convulsive seizures.

5. *Cerebral diseases.*—On this the author forcibly insisted. He referred to the consequences of inflammation, tubercular granulation or tumour, and effusion at the base of the brain; and also to the congestion of pertussis.

6. *Excited reflex actions.*—By far the greater number of convulsions were of a reflex nature. Laryngismus was most effectually avoided by removing every exciting cause of reflex action. He would chiefly guard against four causes of such action: first, irritation of the trifacial nerve, which took place in teething; second, that of the pneumogastric nerve; third, irritation of the spinal nerves; and fourth, the effects of the atmosphere upon the larynx, under certain circumstances. The organs affected in a convulsive seizure were precisely those which its pathology would lead us to expect—the larynx, the sphincters, &c. The author then called the attention of the society to certain bronchitic, hepatic, and renal symptoms, and to the condition of the urine,—points which needed further investigation. He then dwelt on the effect of—

7. *Emotion, passion,* and showed how great and important was the part which they played in the affections he was treating of. He enforced the necessity of bearing them in mind fully in certain cases; he showed that they often constituted the real and only objection to the use of the gum-lancet, which consequently should always be cautiously employed.

8. The effects of augmented excitability were insisted on. States of the nervous system, induced by mild electricity, were compared with those occasioned by disease. The results of increase of excitability were entered into—irritants then acted, which at other times would be inert. A change in the direction of the wind, even, was not without bad consequences. Strychnia induced a species of laryngismus. Emotion, hysteria, epilepsy, tetanus, hydrophobia, all affected the larynx in a special manner.

The author next described those affections of the cerebrum which were consequent on convulsions,—the congestion, the effusion, the occasional paralysis, the risk of idiocy, &c. He then passed on to the question of sudden dissolution, demonstrating how difficult it was to forsee it often, and stating how frequently it happened when the patient appeared in progress to recovery. It was the result of common asphyxia, but not rarely of what he had called secondary asphyxia, which he believed was closely dependent on the blood of the coronary arteries being unduly arterialized. The remedies of asphyxia should be enforced promptly in such cases of sudden death.

Some observations were then made on the diagnosis of convulsions, in which the transient, or permanent, or complicated character of symptoms, as the case might be, were all pointed out as modes of assistance in conducting the inquiry. The author drew attention to the post mortem appearances, which varied as the disease was centric or eccentric, or according to the mode of death. There might be the results of inflammation within the cranium, or nothing found whatever but the appearances proper to asphyxia. Lastly, he made some practical observations upon prevention and treatment; as to the latter insisting on an accurate diagnosis as an indispensable preliminary, on a due attention to the complications of the affection, on the necessity of bearing in mind all the varied forms of irritation, and applying the appropriate remedies without delay, on having regard to the state of the patient during the time of sleep, on protecting it from cold air, &c. And if he had shown the application of the physiology of the nervous system to its pathology, he had gained the object which he had in view in bringing the subject before the society.

Mr. Hird considered that the profession were much indebted to Dr. Hall for his researches on the subject of infantile convulsions, and for his explanation in respect to those cases in which the brain was involved in the cause, and where it was not. He agreed generally in the views of the author, but should be afraid to lance the gums so freely and so often as Dr. Hall had recommended in some of his published papers. In the other plans of treatment recommended he fully concurred.

Mr. Barlow agreed fully with Dr. M. Hall as to the ill consequences of cold in laryngismus stridulus. In some cases, a keen wind was certain to bring on the paroxysm. In a case related by Dr. Hugh Ley, the first attack was produced by the application of cold to the head. He thought no one could contradict the correctness of the view which had been taken of the causes of the disease. He believed by far the larger number of cases were eccentric in their origin, and that depleting measures should never be used without much caution. Irritation of the trunk of the nervus vagus produced reflex action, contrarily to what happened in the nerves proceeding to the limbs: and he thought that in disease, spasm of the glottis, either with or without crowing, might occasionally be brought on by affections of the trunk of this nerve, giving rise either to direct or reflex closure of the glottis. In a case where Sir Astley Cooper tied the

carotid artery, inflammation and suppuration extended upwards in the course of the nervus vagus, and there was a cough, like that of hooping-cough. Sir Henry Marsh, in his instructive paper on spasm of the glottis, had suggested irritation of the origin of the pneumogastric as a cause of the affection; but the state of parts far remote from the nervous centres was mostly at fault. He had never been able to associate enlargement of the bronchial or cervical glands with the disease by way of cause and effect, as Dr. Hugh Ley had done in a work which would ever be consulted for its abundant information in regard to the malady. In two cases he (Mr. Barlow) had found it connected with hydrocephalus; in another, which he had examined after death, with bronchitis; in a fourth, which was fatal, he thought that the last paroxysm had depended on over feeding. In the country—he meant the country properly speaking—the disease was acknowledged to be rare; and even in the crowded districts of towns he thought it rarer than was supposed. Out of 6879 patients who had been admitted at the Children's Infirmary, since January, 1st, 1846, there were only seven cases reported of this disease. In three cases he had observed the paroxysm produced by the act of drinking—a fact of interest, viewed as an addition to those phenomena which connected laryngismus with the convulsive actions, of which it was certainly one. He would ask Dr. Hall if he had observed this fact.

Dr. Theophilus Thompson remarked, that in the majority of obstinate cases of laryngismus stridulus, hydrocephalus was either present, or threatened to develope itself. Sometimes convulsions were the result of simple irritation; in other instances they originated in inflammation.

Dr. Clutterbuck thought that the brain was always involved in cases of convulsions, and that it suffered at these times from inflammation. The brain was a complicated organ, and various parts of it performed various functions. He agreed in the treatment recommended by the author.

Dr. Reid did not find that dampness of the atmosphere was a cause of laryngismus; on the contrary, the affection was rare in damp localities. He had some doubts respecting the prejudicial influence of a north-east wind in these cases, and mentioned two instances in which it had no such bad effects. He had never seen a case during the time the infant was suckling.—*Dublin Medical Press.*

Tubercular Tumour of the Vertebræ opening into the Œsophagus.—A female, aged 29, entered the hospital of Bassano for an obscure affection, accompanied by extreme marasmus, which had supervened upon her last confinement. She had very great difficulty of swallowing, repeated vomiting, difficulty of breathing, and great general debility. She died completely exhausted by hectic fever. On examination after death both pleuræ were found adherent, and behind them, directly over the vertebral column, a tumour was discovered, about the size of a walnut, and springing from the fifth dorsal verte-

bræ. A second tumour, of larger size, was also seen to include the bodies of the fourth, fifth, and sixth vertebræ, the osseous structure of which was converted into a soft caseous matter. On opening the œsophagus, that canal was found to be narrowed, and firmly adherent to the most prominent part of the last-mentioned tumour, a portion of the contents of which had escaped through an irregular ulceration of bad aspect.—*Prov. Med. and Surg. Journal, from Giornale dei Progressi.*

Abscess of the Liver treated by Puncture.—The following cases reported in the *Medical Times* by Dr. Clay, is sufficiently rare in this country to deserve further publicity:—

The patient complained of fixed pain in the right superior portion of the umbilical region, for which he was treated antiphlogistically without relief. His bowels were constipated; countenance yellow; spirits depressed; anorexia; pulse 90; evident enlargement of the liver, with paucity of bile. He took ox-gall, dr. ij.; calomel, gr. x., divided into twenty-two pills, of which, one three times a day was the dose. Under this plan he quickly improved, and remained well until after bathing, when the fixed pain returned. Being at this time in a different locality, he was again trented by bleeding, &c., and as before without benefit. He then took the ox gall and calomel, and a second time became greatly relieved. Dr. Clay lost sight of him from this time, but it appears that while in Dublin he suffered a severe relapse, with pain in the old spot, which had become more tense and permanent. At this spot Dr. Clay passed a grooved needle, and as it gave issue to a drop of pus, he tapped it freely with a trocar, and drew off four pounds of fœtid pus. At each dressing for several days a pound of pus escaped, but after that time the discharge gradually diminished, and at the end of three months the man was completely recovered. Dr. Clay calculated that in all, at least sixteen pints of matter must have been discharged. The treatment after the evacuation of the abscess was tonic and alterative, the functions of the liver being restored by the ox gall and calomel.—*Monthly Journal.*

Sulphate of Quinine in Aneurism of the Aorta, and in other internal Anuerisms.—It appears that sulphate of quinine has been employed with much success in some Italian hospitals for the relief of aneurism of the aorta and other internal aneurisms. It belongs, in this use of it, to what are termed hyposthenics, (subduing action,) and is to be carried as far as the system will bear it. It has, says its Italian supporters, the immense advantage of bringing down the pulse without disturbing its rhythm, of making the buffy coat of the blood disappear, that is, of dissipating the organic condition,—namely, arteritis, on which it depends, and thus of retarding the progress of the aneurismal tumour. The other hyposthenics adapted to the same end according to the same authorities, as by alternation with the sulphate

of quinine, are the vegetable and mineral acids, the sulphate of iron, the ergot of rye, the cold ferruginous waters, the arsenious acid, the acetate of lead, and the iodide of potassium.—*Ibid.*

Homœopathy.—The following case of administering powerful drugs in large doses under the guise of homœopathy, is noticed in the *Medical Gazette* as having recently occurred in London:—

"A lady who had been attended by a highly respectable general practitioner, recently consulted a homœopathic physician, who has acquired some celebrity in the fashionable quarter of the metropolis, for his skill in treating and *curing* diseases by infinite small doses. She received from him four small white powders, with explicit directions, (now lying before us,) one to be taken every other night,—each powder being numbered, and the night on which it was to be taken, as well as the mode of taking it, being particularly specified,—"all dry on the tongue." No. 1 was swallowed according to order, and the patient was soon afterwards seized with great sleepiness, stupor, and other alarming symptoms indicative of the action of a powerful narcotic. These effects were followed by diarrhœa. The patient was alarmed, and instead of looking upon the result as an indication of the beneficial working of homœopathic powders, or as a means of curing her of any latent scepticism respecting the efficacy of infinite small doses, she was prudent enough to return to her old medical friend, to whom she handed the remaining powders, with the directions. This gentleman, suspecting that they contained some active narcotic, caused them to be submitted to a chemical analysis. We have now the report of this analysis before us, and of it we shall make the following abridgment. The powders were numbered 2, 3, and 4. They were *similar in appearance*, except that No. 3 was somewhat whiter than the other two: there was nothing to indicate that they were of different composition; and as they were to be taken in the same way on alternate nights, this could not possibly be suspected.

"Although there was no great dissimilarity in bulk, the powders were very unequal in weight. No. 2 weighed 3.4 grains; No. 3, 1.5 grains; No. 4, 2 grains. No. 2 was found, upon analysis, to consist entirely of calomel and *morphia*, the morphia forming not less than *one grain*. No. 3 contained no morphia or calomel, nor any mineral or other substance, but merely *sugar of milk*. No. 4 was composed of calomel and morphia, the morphia amounting to one half grain."—*Prov. Med. and Surg. Journal.*

Instrument for exhibiting the motions of the Chest during Respiration.—Mr. Sibson, of Nottingham, exhibited at a meeting of the Provincial Medical Association a newly-invented instrument, for the purpose of ascertaining the comparative movements of the chest in respiration. The instrument, which was of simple construction, consisted

of a dial-plate, on which were indicated degrees of the one-hundreth part of an inch, attached to which was a rack and pinion; as the rack rose, by the expansion of the chest, the pinion, which ran through, communicated with the indicator, which showed upon the dial-plate the number of degrees the chest rose, and the rack was returned by means of a spring. If the instrument was held steadily on the chest, it would show the precise amount of its expansion. Where he had the privilege, as he had at the hospital to which he was attached, he preferred his patients should be in bed to test the chest, though it could be done without, as the instrument would show the workings of the chest when a person was either sitting or standing. If he had any of the gentlemen he was then addressing with him at the bedside of a patient, they would delight in the accuracy of the working of the instrument. He was first assisted in the design of it by an operative, who was a patient in the hospital at Nottingham; but the perfect instrument which he was then shewing them, was made by Mr. Simmonds, an eminent watchmaker of London, to whom great credit was due for the accuracy of its construction. With regard to the movements of the chest in health and disease, he would remark, that out of ten patients who supposed themselves to be suffering from disease in the chest, in nine of them perhaps it was nothing of the sort, and with the assistance of that little instrument, or the spirometer of Dr. Hutchinson, which had been exhibited to them by Dr. Shearman, they could send their patients home with the pleasing fact upon their minds that they were healthy men. Mr. Sibson then went on to show that, by the instrument before the meeting, he could more accurately trace the seat of the disease in the chest, and ascertain whether the disease was seated in the upper or lower lobe of the lungs, or any part of them, as the instrument indicated the contraction and expansion caused by expiration and inspiration, and would also show the movement of the abdomen. In healthy subjects the times of inspiration and expiration were generally the same, though in many subjects there would be a pause at the conclusion of inspiration. Mr. Sibson then exemplified the working of the instrument, the accuracy of which was fully acknowleged, on his own chest, and explained that a difference of three degrees in the movement of one side of the chest as compared with the other, when indicated by the instrument, was sufficient to cause attention to be turned towards it, though it did not necessarily follow that where there was such difference, the lungs might be diseased, as abscess of the ribs, or any disease or injury of them, might cause one side of the chest to move less liberally than the other; so that they must not always conclude that the lungs were affected when they discovered this difference, as in one instance he knew, it had been caused by a diseased shoulder. He compared the instrument to a pigmy spirometer, capable of being carried in the pocket of a medical man, who, when he had to travel upon horseback, could not carry with him the valuable instrument of Mr. Hutchinson.

An improved tube, used in laryngotomy, was also exhibited by Mr. Sibson; and a simple and novel construction to supersede artificial in-

spiration by means of bellows, in cases of drowning, &c. The latter consisted of a piece of flat flexible metal, with a handle at the back, and covered on the face of it with a newly-discovered adhesive composition; this being placed on the chest and gently drawn upwards, and compressed downwards, so as to carry the walls of the chest with it, would, he thought, supersede the use of the bellows in many cases. At the same time he must deprecate the pressure upon the bowels used in cases of drowning or poisoning sometimes, as he had frequently found from *post-mortem* examination such pressure was highly injurious.—*Prov. Med. and Sur. Jour.*

Mercurial Treatment in Typhoid Fever. By M. Serres.—M. Serres begins by stating that, in his opinion, typhoid fever consists in an exanthematous affection of the intestines. The febrile excitement, the diarrhœa, abdominal symptoms, and cerebral manifestations are entirely governed in their progress and intensity by the intestinal eruption. In this respect M. Serres thinks that typhoid fever can be most properly compared with small pox, in which Sydenham has shown that the violence of the malady is always proportioned to the confluence or mildness of the cutaneous eruption. The professor, therefore, concludes that, by keeping the intestinal diseases under control in typhoid fever, the general reaction, its consequence, will be thereby prevented from attaining any dangerous height; and no medicine seems to M. Serres so well calculated to produce this result as mercury. Every second day M. Serres prescribes the following pills:—℞. Hydrarg. sulphureti cum sulphure. gr, xviij.; tragacanthæ, gr. x.; syrup q. s. fiat massa in pilul. iv. dividenda. Every morning inunctions with oz. ij. of mercurial ointment are made upon the abdomen. The treatment is suspended when incipient stomatitis is noticed. Under the influence of mercury, diarrhœa is gradually arrested, the tympanitis reduced or prevented, and, although the average duration of the malady is not diminished, still its violence is much abated.—*London Medical Times.*

Use of the Salivary Secretion. By M. Bernard.—The recent researches of Mialhe and others tended to show that saliva contains a ferment capable of changing starch into sugar. The experiments upon which was founded this opinion consisted in chemical researches on the fluid escaping, during a given time, from the mouths of animals. M. Bernard derives from a new series of experiments a contrary opinion. Instead of merely collecting the buccal secretions, he took the saliva from the glands themselves, and states that in this unmixed and pure condition that fluid is incapable of causing saccharine fermentation in starch. Pursuing his experiments, M. Bernard separated from the mouth of a dead horse several shreds of the mucous membrane, and found that after prolonged desiccation, they still retained the power of transforming starch into sugar. It is, therefore, the mucous membrane, and not the saliva itself, which causes this change in amylaceous substances. The function of saliva

is then simply, according to M. Bernard, to moisten the alimentary bolus, and to connect its various parts into a homogeneous paste. *Ibid.*

On the entrance of Coal and other Insoluble Substances from the Intestinal Canal into the Blood. By Professor Oesterlen, in Dorpat. Charcoal rubbed down into a fine powder, and mixed with water, was given to several animals, chiefly rabits, for from three to six days. They all swallowed about one ounce. With the exception of blackened fœcal discharges, nothing anormal was observ ed during life, and when killed, the only unusual appearance discovered was the black colour of the intestinal mucous membrane. In all the animals, however, blood taken from the mesenteric vein, the portal vein, as well as the clots found in the right cavities of the heart, in the liver, spleen, and lungs, exhibited on a microscopic examination, minute pieces of charcoal. The size of these varied from 1.300th to 1.60th, and in some instances to 1.42nd of a line. They were less numerous in the kidney and blood of the vena cava. The urine and bile contained none. Other animals fed on Berlin blue, gave exactly the same result. Thus there can be no doubt that solid and insoluble substances, after being received into the stomach may enter the mesenteric veins, and through them the general circulation.—*Zeitschrift fur Rationelle Medizin, from Dub. Med. Press.*

Internal Strangulation of an Intestine.—The following case recorded by Dr. Biaggini of Pestoic, possesses many points of interest, but chiefly from the cause to which it is attributed:—A boy, aged 15, was witnessing some public ceremony in the midst of a great concourse of people; he felt a desire to go to stool, but was constrained to resist from the difficulty of getting out of the crowd, or of finding a convenient place to ease himself. After enduring this for some ime, he felt as if he was exposed to a sharp cold wind, which he attributed to his being thinly clad: in this state he remained for five hours, and at last got an opportunity of retiring; but on trying at stool, he found to his surprise he was totally unable to pass anything from his bowels. He was taken into a house, where glysters were thrown up, and the abdomen was fomented. For two days he remained without any alleviation, although the enemata brought away a trifling quantity of soft fæces. The belly now became swollen and tympanic,—there was constant vomiting, and a smart fever set in; in short the patient presented all the symptoms of internal strangulation of the bowels. The whole belly was sonorous on percussion above the umbilicus, but gave a dull sound below this point. Notwithstanding a variety of treatment, the distress continued until the twelfth day, when he expired.

Dissection.—The peritoneum on both its visceral and parietal surfaces showed traces of very high inflammation, and there was a quantity of curdy serum in its cavity; the intestines adhered here and there by soft and recent lymph. These adhesions were carefully broken

down, and it was seen that the distension of the bowel, which existed in the upper part of the canal, ceased abruptly at the lower extremity of the ileum; at this point there was a firm tumour formed by a twisting of a knuckle of gut, covered throughout by recent bands. Below this tumour the large intestine was so contracted as not to be thicker than a ribon, or even a cat's bowel. In detaching the bands with care, that surrounded the tumour, it was found to be formed in the following manner—the mensetery was pierced by an aperture above the cœcum; it was in this hole that the knuckle of intestine was held and strangulated, and through which a portion, about a palm in length, had passed; it was twisted upon itself and was firmly fixed in its situation by the bands above mentioned. The mucous membrane of the intestine was injected, except where it was constricted by the part in which it was held.—*Ibid, from Arch. Gen.*

Etherization in Midwifery Practice.—In the *Gazette Médicale de Strasbourg*, there is a case given by M. Stoltz, where *turning* was deemed expedient, and before anything to that effect was done, the patient was put under the influence of the vapour of ether until insensibility to external impressions was produced. The case presenting nothing peculiar in itself, it will suffice to say that the ether neither diminished the resistance of the uterus to the introduction of the hand, nor facilitated the version or extraction of the fœtus. No accident followed to the mother from its employment however. The child had been dead on her admission into hospital.—*Ibid.*

Case of Strangulated Femoral Hernia successfully treated by Opium. By Charles Mayo, Esq., F. R. C. S., &c. Mrs. D., aged about 67, became subject to femoral hernia on the right side about four years ago, at which time it was strangulated, and after some trouble I succeeded in reducing it by the taxis. Since that time she had worn a truss, and was careful to keep it reduced. The truss had now become broken and nearly useless. After some unusual exertion on the morning of the 24th of April, she felt a large portion of bowel suddenly to protrude, she became sick, took opening pills, and laid up. On the 25th she sent to me; I found the swelling as large as an egg, painful, and tender, from her having used much exertion in endeavouring to reduce it, or push it back, as she said. She was constantly sick. I gave her a cathartic enema, and used the taxis without effect. I then left her six pills with a grain of opium in each, desiring her to take one every hour till I saw her again, beginning at 4 P. M. At nine o'clock I found that she had taken four of the pills. that the vomiting had ceased after the first, and that she was quite easy; cold cloths were kept applied to the swelling, which remained immoveable. As she was so easy, I advised the two remaining pills to be taken at intervals of four hours, another glyster to be thrown up in the course of the night, and a cathartic draught to be given at six in the morning.

April 26th. I received a message this morning that Mrs. D. was

completely relieved, and on my calling about twelve, I found that the fifth pill was taken at midnight, and the sixth at four in the morning; after this she felt completely relaxed all over, her bowels rumbled about, and the swelling seemed to be enlarged and distended with wind, but soon after on feeling it with her hand, it had become softer, and presently went entirely up under very slight pressure. She took the draught at six, it had operated satisfactorily, and she was delighted to sleep all the day after. I was not less pleased to have the necessity for an operation to be superseded, which I had the day before considered as nearly inevitable. Dr. Butler Lane has so well set forth the *modus operandi* of this remedy that I have nothing more to add, than that if you consider this communication to be of any use as an encouragement to others to make such trials, it is quite at your service.—*Prov. Med. Jour.*

Case of Ileus.—A portion of Intestine Discharged by Stool. By Dr. Nagel of Lemberg.—K. J. a domestic, aged 21, robust, always enjoying good health, except frequent attacks of colic within the last few years, was attacked in the night, 12th—13th February, 1843, with violent pains in the lower part of the abdomen, accompanied with shivering, frequent vomiting, and purging. On admission into the hospital on the morning of the 13th, he was in the following state:—Head hot and painful; tongue foul; thirst; abdomen swollen and tender to the touch; skin dry: pulse full, hard, and frequent; vomiting, with watery stools tinged with blood. (Antiphlogistic treatment.)

The symptoms continued much the same till the 16th, when they diminished in intensity, and the stools were no longer tinged with blood. On the 19th there was violent tenesmus, accompanied on the 23d with prolapsus of a portion of intestine, which, however, was easily reduced without causing pain.

On the 26th, the patient free from fever, and altogether in a satisfactory state, passed by stool a portion of intestine twenty inches long, and at some points two inches broad; it consisted of a portion of the ileum, the cœcum, appendix vermiformis, the whole of the ascending colon, and a portion of the transverse. The mucous membrane was everted, of a brownish colour striated with black, especially the cœcum; it was soft and easily removed. The peritoneal coat was likewise of a brown colour, and corroded, leaving bare the muscular coat, which was also destroyed at some points. For some days after there was slight pain at the lower part of the abdomen; but on the 23d March, the patient left the hospital perfectly cured.—*Dub. Med. Press, from Oesterreichische Med. Wochen and Med. Gaz.*

THE

MEDICAL EXAMINER,

AND

RECORD OF MEDICAL SCIENCE.

NEW SERIES.—No. XXXV.—NOVEMBER, 1847.

ORIGINAL COMMUNICATIONS.

Sketch of Burmah and Medical Science among the Burmese.

By J. DAWSON, M. D., formerly of India.

Burmah presents to the eye of the traveller, the philanthropist, and man of science, diverse characteristics, which are as interesting as they are curious, and seem generally unknown to most of the enlightened nations of the earth. As an independent Asiatic sovereignty, with borders and boundaries tolerably well defined, it is a pretty considerable dominion, and is bounded on the north by China, on the south by Siam, on the east by the independent Shan states, and on the west by the territory and bay of Bengal.

It is esteemed as being well supplied with a proper proportion of hills, mountains and vallies, small lakes, extensive rivers and springs, with plenty of excellent timber, and inexhaustible stores of geological and mineralogical productions. Vegetation is luxuriant, and both crops and fruits, when cultivated, are abundant. In a word, the country is rich in the possession of all the natural resources necessary for the support of an overflowing population. But from the peculiarity of the government, the nature of the climate and other causes, it contains nothing like the amount of people which it could decently maintain. The entire population, including Talines, Karens and Burmans, numbers about fifteen millions.

Its greatest geographical extent runs north and south, and is over 800 miles. Within this range of latitude, stretching some

degrees beyond the tropic of Cancer, you have the extremes of wet and dry weather. To the north it is dry, the land in the neighbourhood of "Ummeerapoora"—the capital of the empire—being irrigated principally by periodical inundations of the Irrawaddie river. To the south it is wet, as much as 240 inches of rain falling during the year, 200 inches being the average quantity.

The government is a despotic monarchy, the King having complete control over the life, the liberty and property of any of his subjects. In his hands are the reins of absolute power, and he confides them to whom and how long he pleases. The name of the present sovereign of the kingdom is "Tharrawaddie."* He usurped the throne in 1837, and won the sceptre by deeds of blood. His several official titles are, His Golden-footed Majesty—King of the Rising Sun—Lord of the White Elephant, reigning over Thoo-na-pa-ran-ta, Tam-pa-dee-pa and many other great countries.

As a nation, the Burmese are usually classed among the half civilized races of the world. The people individually are humane, hospitable and destitute of bigotry, but as a nation they are proud, arrogant and self-sufficient. They have regular laws, both religious and civil. They have a literature and an established national faith. In their numerous books, called the *Beedaghat*, and *Demathat*, are contained the prescripts of their sacred and judicial institutions.

Gaudama is their divine lawgiver. He was their last incarnate deity, or Bhood. He died, it is said, of a diarrhœa, produced by eating pork. In some of their religious temples, he is represented as lying on a sick couch, with a doctor standing near him, having a pill between his fingers, and just ready to be administered as he fainted and expired. It is disrespectful to his memory, as well as positively sinful, to say that he is *dead*. Having entered "*Nike ban*," or the state of annihilation, he is regarded as no longer existing, either corporeally or spiritually. Believing in the transmigration of souls, of the passage of a spirit from one form or body into that of another, of the spirit of a man entering into that of an ox, a dog, or a cat, of a fish becoming a fowl, and a fowl a reptile, ultimate annihilation is the consummation of all their hopes and expectations in reference to eternity. During these almost endless peregrinations through the universe, in worlds unnumbered and unknown, the doctrine of personal merit is conspicuously held up to view. Do good and you will get good, is the old adage with them. Do evil and evil will recoil back upon your own head. By doing well they may be advanced to the dignity of angels and of gods. By doing ill they will be degraded to the level of fiends and fierce serpents.

* Intelligence has just reached of the death of this King.

Thus, the religion of the empire is Bhoodism. Unlike the Brahminism of the Hindoos, which is a cruel system of personal torture and bloody sacrifice, it is a humane system, based on certain laws, doctrines and precepts. It supports a priesthood and directs the building of magnificent temples and costly pagodas. It forbids the spilling of blood, even to the killing of a fowl, though monarchs have revelled in the slaughter of their unhappy victims. Contrasted with other forms of paganism and heathenish creeds, it might be considered as the mildest in principle, and the most humane operating system that could have originated in the mind of a mere man, unaided and unguided by any light drawn from the Christian religion. Some of their sacred laws are precisely analogous to those of the decalogue, recorded by Moses in the book of Exodus. Four of them are exactly similar in import, which prohibit killing, stealing, lying and adultery.

The institutes of Menu constitute their domestic and civil codes. Their criminal laws are very arbitrary. Decapitation is the common mode of executing malefactors; but on extraordinary occasions, emboweling, crucifixion with the head downwards, a horizontal division in a wedged position, by a saw into halves, tearing to pieces in quarters by elephants, have been cruelly and disgustingly practised.

Their books are not prepared of paper, but are formed of bundles of palm leaves, secured together upon a string. The writing is traced upon them by an iron point, stiletto, or pen.

The Burmese language appears to be derived from the "*Pali*," which is one of the ancient sacred languages of the East. Being composed chiefly of guttural, palatal and nasal sounds, the spoken language is not mellifluent, but full, difficult, and harsh to the ear of a European.

In stature, the people are short, muscular, and firmly built. In movements, the females are graceful. The men sometimes at particular feats are very energetic and sprightly, but ordinarily they are slow and inactive. Boat racing is a favourite exercise with them, and forms one of their great annual festivals. Few of them can be called stout or fat. The colour of their complexion varies from a light golden-yellow to that of a blackish-brown. The very darkest of them is much lighter coloured than a genuine African.

From the following particulars may be obtained a good idea of their physical proportions. It is an average of twenty-five men, who were examined for admission into the ranks of the Local Corps, serving in the Tennasserim provinces, under the jurisdiction of the English government.

Mean age of these individuals was twenty-four years.
" height, - - - five feet, three inches.
" weight, - - - eight stone two pounds.
Size round the chest, - - thirty-two inches.

Rice is emphatically the staff of life in India. Some condiment in the character of a curry is generally used with it. Many of the natives prefer a piece of roasted salt fish, with a sour vegetable, or fruit, to eat with the rice. They drink no coffee or milk, and very few Burmese take tea. Tea, however, is very frequently cooked up as a vegetable with garlic, onions, &c., and is prized as a delicacy. It is the customary offering when an application is made by a young man for the hand of a young lady in marriage.

The existing records of their ancient literature comprise many works on astronomy, astrology, metaphysics, history, chronology and medicine, beside some tables of the minor mathematics.

Medicine, as a science, is neither taught in schools, nor studied under private teachers. The profession has no medical colleges whatever in the country, and public hospitals are among the things which are yet to be founded. The people have none of the means or appliances possessed by enlightened nations for the acquisition and cultivation of this branch of useful learning.

The healing art is comprehended just about as well by the Burmese practitioners as it was by the bold, ignorant empirics of Greece, who practised before the time of Hippocrates. The most celebrated medical writer among them was *Zeewaka.* He was a disciple of Dee-tha-pa-mouk-ka, and flourished about 550 years anterior to the Christian era. To him are attributed many valuable treatises on medicine. His works, however, are nearly all lost, but his reputation is still cherished for his great learning and wisdom. For a knowledge of anatomy and mineral medicines he was eminently distinguished. Without striving to emulate his wisdom, his followers are content to revere him for his sagacity, admire him for his knowledge, and applaud him for his success. Since his days there have been many inferior writers, but none of any note within the period of modern times.

In questions of doubt or difficulty which may arise, it is a fundamental rule of the profession to refer everything to the authority of an ancient author. His opinion was so and so, and this is deemed enough. Possessing such a veneration for the ancients, and the fraternity apparently resting satisfied with what has hitherto been accomplished, has given rise to certain corruptions of these early writings. The practice of lauding to an extravagant degree these professional heirlooms, descending from previous ages, and, like the laws of the Medes

and Persians, considering them unalterable, none having the moral courage of publicly advancing and vindicating any new theory that might occur to them, furnished some wily ingenious authors with opportunities of engrafting or adding their own supposed discoveries upon the original works of the old practitioners, whose writings, to the regret of all, have thus become garbled and filled with spurious passages.

Subjoined is an extract from a work which professes to be a treatise on anatomy, and claiming for itself a divine origin.

"The fœtus consists of thirty-two parts: its height becomes six feet; the hairs of the head are 25,000,000 in number; those of the body 99,099,000; the nails are 20; the teeth 32; the cuticle which covers the skin of the body (when rolled up) is the size of a cherry; the muscles are 900; the arteries 900; the veins 17,000; the bones 300; the joints 300; the bones are filled with marrow and sperm. The bones are distributed as follows: 9 in the upper skull, 1 in the forehead, 1 in the nose, 2 in the eyes, 2 in the ears, 2 in the jaws; the teeth are 32; 1 bone in the chin, 7 in the neck, 2 collar-bones, 2 shoulder-bones, 4 in the lower arms, 64 in the hands, 14 in the breast, 24 ribs, 1 in the middle of the lower breast, 18 in the back, 2 hip bones, 2 posterior bones, 4 thigh bones, (so in original,) 4 bones in the legs, 4 knee-bones, 4 bones in the heels, 64 in the feet, 64 soft smaller feet bones. There are also 100 more attached to the inner bones."

According to this arrangement of the osseous system, instead of 300, there are 434 distinct bones in the human body. If you were to point out the discrepancy between the two statements, it would only excite a smile. The mistake would remain unaltered and be perpetuated, because the physician could not say whether the one or the other was right, or whether both numbers might not be wrong.

Thus in anatomy all is ignorance and mystery. The mists and mazes of antiquity, with all its glorious uncertainties and boastful pretensions and authority, remain to be swept away. After this first step has been taken, then a lasting foundation might be laid from imported European and American medical science.

Chemistry is still a sealed casket of jewels, which possibly it will be the happiness of coming generations among them to see opened. Its beauties, even under the most common elementary forms, have yet to be unfolded and exhibited. An occasional pretender, however, has stepped on the platform of public notice, and declared with much vehemence that he has both seen and done wonders in the sublime and much vaunted science of alchemy. But like the philosophers of old, who have endeavoured to effect the transmutation of metals, and to discover a universal elixir for curing the whole round of human maladies, and for conferring longevity upon man, their names, their experi-

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" height, - - - five feet
" weight, - - - eight s
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Rice is emphatically the staff of life in ment in the character of a curry is gener of the natives prefer a piece of roa vegetable, or fruit, to eat with the ric milk, and very few Burmese take frequently cooked up as a vegetab is prized as a delicacy. It is application is made by a you lady in marriage.

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Medicine, as a scienc under private teacher whatever in the c things which are of the means or the acquisition

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Midwifery is practised by old women, the men having nothing to do with it, unless to give a dose of medicine when needed. The manual part certainly could not be monopolized by more dangerous hands. As a specimen of their treatment it may be mentioned, that when any sort of obstruction arises, the most cruel methods are pursued for overcoming it. From the roof of a house a long band is suspended, after the fashion of a swing, the female is placed upon it, her face looking to the floor, and urged with all her might to press downwards, to force away the child, her back being pressed at the same time with the knee or foot of one of her sweating attendants. If this does not prove effectual, she is stretched upon her back and is squeezed

ng the sides by the hands of two old women, whilst
the heel of her foot on the abdomen, and thus
Astringent and other washes are injected into
instrument made of zinc and lead, resembling
, having rounded trunnions, by which it is
mental piston rod. The sufferings of the
language can adequately portray. As
ch cases terminate in death. Happily
s.

as been the practice of these people
rturition to a species of roasting
ics, the heat at a certain season
To a high temperature is added
om which the parturient female is
e floor, where she is kept for at least
ter the birth of the child she is rubbed all
feet with a stimulating yellow turmeric paste,
taking cold. The effect of the fire is said to excite
and drain away all the noxious and impure fluids of the

Their notions of the development and growth of the fœtus are singularly crude, as displayed in the following quotation:

"At the first the fœtus is only water, not larger in the parent's womb than the drop detected with difficulty at the point of a hair of that sleek animal, the hyæna, after it has been immersed in oil clarified a hundred times, and from which the oil, so taken up, has been shaken one hundred times. The fœtus which is thus nothing but water, having become froth, (in this unchangeable way does it happen,) afterwards enters its third stage, and receives life and form; then the living fœtus becomes blended in its fourth stage; the two hands, the two feet and the head are produced and branch off into five extremities, the hair of the head and of the body, the ears, the eyes and the nose, are then formed."

The whole process is this: first, water; second, froth; third life and form; fourth, the branching, or growing out of the different members, as from a common centre which seems to be the trunk; and the fifth stage including the perfection of the head and the several limbs.

The periods of development here follow:

"The fœtus in its first stage of water is produced in fifteen days; its second stage is formed at the termination of one month; the third at the end of the second month; the fourth at the end of the third month; at the conclusion of four months, it branches forth into five extremities; at the fifth month the eyes and other members of sensation are formed. The fœtus remains ten months* (three hundred days) within the parent's womb, and after remaining there as in a repository, it comes forth."

*Two hundred and ninety-four according to others.

The Burmese say, that man is formed of the four great elements of "Earth," "Fire," "Air," and "Water."

"There are four elements of which the human frame is composed. The first is earth, the second, water, the next fire, the last, air; and in this manner are they distributed: there are twenty portions, or members formed of earth; viz.: the hair of the head, the hair of the body, the nails, the teeth, the cuticle of the skin, the flesh, the veins, the bones, the marrow of the bones, the lungs, the heart, the liver, the spleen, the stomach and the bowels, both large and small. Twenty-two parts are formed of water, gall, phlegm, pus, blood, sweat, indurated oil, tears, liquid oil, spittle, mucus, gluten, urine. Of fire, there are four parts; viz.: the embryo of fever, the principle of producing age, the embryo of melancholy, and the principle causing digestion. Of air there are six parts: the principle which occasions belching; that causing a breaking of wind; the embryo of disease in the stomach; the principle of circulation."

The practice of medicine seems to be followed only as an empirical art, and is mixed up with considerable superstition, sacred and vulgar. The following is an example of the rules which guide them.

"If a physician is called to attend upon a patient who lives to the south of his house, that person's disease cannot be healed (by him:) if the patient resides to the southwest, he can be cured in three days: if to the west, the complaint can also be gradually cured: if to the north, the patient will not completely recover: if called from the northeast upon Ta-nen-la (i. e. Monday,) he must not attend; if from the north, the sick person will not recover; if called from the east on a Monday and presented with a liberal fee before going, the patient will recover in three days, if the spirit be propitiated by an offering of food placed on the east side of the house. There is sometimes a pulse felt between the thumb and index finger of the right hand, at such times the subject is under the influence of witchcraft, the disease therefore is not a real one; boiled rice, fried fish and a fragrant condiment being placed on the north side of the house, as an offering to the spirit, the complaint will disappear. When there is a pulse in the middle joint of the right thumb, beware! it is the work of a household evil spirit to cause dejection of mind. When there is a throbbing pulsation in the fourth finger, the intellect of the person is obscured, and the body is parti-coloured; a witch and the household spirit possess the person. When the blood-watchers of life (the pulse in the wrist and foot) vibrate strongly, it is caused by an evil spirit: when they cease to beat, refrain from administering medicine—life is departing."

As the foregoing instructions to medical men are believed to be enjoined by divine authority, all reasoning as to the fitness or utility of the proposed cures is at once superseded. Their mystical influence, has become deep-rooted, from the acknowledged authority of accumulating ages, and though seemingly puzzling as a fact, that such a palpable chain of errors could have so long maintained its power, without a spirit to investigate, or a struggle to overthrow it, yet, unlike the gordian knot of the famous Phrygian chariot, it must be confessed that no Alexander has ever risen to cut it, and enfranchise the mind.

Every Burmese physician is strictly an empiric. Though

some of them are conversant with a long catalogue of simples, still they have but one or two remedies for each disease, and when these fail, their skill is at an end. They appear unable understandingly to adapt means to ends. All is blind chance. In the use of the articles of the materia medica which they employ, they manifest but little judgment, and betray an imperfect acquaintance with their real virtues. Their manner of administering mercury, and other mineral medicines which enter into their materia medica, is open to the same objection.

In relation to Nosology, the whole circle of diseases is embraced under two grand classes. Their books of medical practice assert that "of the diseases to which the human frame is liable, there are ninety-six. Of which sixty-eight are wind complaints, and twenty-eight gall complaints. According to some others, there are eighty of the former, and sixteen of the latter." Symptomatology, which is the basis of good practice in any country, is but little understood. The meaning of symptoms, the difference between cause and effect, can hardly be intelligible, where there is such a notorious want of correct anatomical knowledge.

It is not a little amusing to witness the exploits of most of these warriors of physic. While a few of them appear to be deeply read in works on medicine, such as they are, and are otherwise generally intelligent, the mass are without a particle of book knowledge, and as ignorant almost as an untutored Indian. But there is this to be said in extenuation, that books are rather scarce with them, just as it was in Europe some two or three centuries ago, before the more general introduction of printing. A number, however, are collected together in some of the older Kyoungs, or monastries under the charge of the Bhoodist priests, where they are piled up for preservation as relics of the past, in large boxes, which are richly ornamented for this particular purpose.

The great field of medicine in Burmah, as in most other oriental countries, being entirely without any sort of barrier, or fence, in the shape of a legal test, or collegiate trial, every simpleton that pleases may ramble into its alluring precincts, to try his fortune. The only requisites for the office, are a brazen face, a flippant tongue, and a bag of drugs. If a Burman conceives to himself a desire to execute the functions of a doctor, he begins to practice at home. The first two or three cases are generally members of his own family; and having tried his ingenuity, he has perhaps been successful. As may be supposed this success is highly encouraging, and prompts him to march forward in his new career. The cases were probably such as would have turned out favourably

without any kind of treatment. But this circumstance has nothing to do with it. In due time, after these astonishing triumphs have been achieved by our adventurer, friends in the neighbourhood call to make a visit. A story is got up relative to these wonderful cures that the new doctor has effected. Beating their breasts, the old folks look amazed and thunderstruck, and sing out, "*a mai, a mai,*" oh me, oh me, how wonderful! Assuming an air, of dignity and an apparant earnestness, the "*Sa tha mah,** *theken,*" for such now becomes his title, attempts to explain the nature of the disease, and above all how easily it could be managed in his hands and by his medicine. All this great matter is of course borne in mind by the visitors. Shortly after the doctor receives a call to see a sick person residing at the other end of the town. If he happens to think that the fates are not against him, he goes, but should the time be unpropitious, he declines and waits for another patient.

Having thus entered the professional sphere, the gentleman has to bestir himself, to look dignified, and furnished with drugs like a regular master of the healing art. A bag to throw over the shoulder is provided. This is to carry with him all the medicines he requires when going to visit the sick. His stock, which is contained in the cotton bag, mostly consists of a little brimstone and some bluestone, some mercury and crude antimony, a small lump of opium, a few bitter and aromatic roots, some powdered spices, as cloves, cinnamon, black pepper and ginger, either mixed or separate in small tin boxes, a little garlic and capsicum, a hog's tooth or two, or a couple of teeth of some wild animal, the claws or nails of a tiger, a flat piece or two of metal, some cotton and woolen strings or thread of different colours, (all the latter are to apply as charms,) and a China cup or two for giving medicine. In the majority of instances this enumeration comprises the whole drug establishment of the native doctors of that country. There is, however, a class of druggists to be found in the public bazaars, who keep a larger and more varied stock, and sell to the practising physicians and quacks.

When summoned to visit a patient, the practitioner makes the person sent sit down and give some account of the case. Having thus learned a few of the particulars, a fee is demanded in advance to buy medicines. A message is then returned to say that the physician will be in attendance presently with his remedy. Reaching the house, he steps in, and walks right up to the sick man. There is no ceremony of bowing and scraping observed,

* "*Sa tha mah*" literally means doctor, or master of medicine. "*Theken*" is a term of respect, and signifies friend, sir, master, or lord.

as may be seen in some more civilized parts, and no compliments are exchanged of wishing "*good day*," &c. The doctor sits down on the floor, by the side of the individual, and proceeds to feel the pulse, looks into the eyes, nose and ears, and sometimes into the mouth. Whether the mouth is omitted in the examination intentionally, or from neglect, I have not heard. But as the whole nation, without exception, chew the beetle leaf and nut, with slacked lime, tobacco and catechu all mixed, it keeps the mouth constantly stained of a red colour. Crusts form on the teeth from this habit. Very seldom a question is asked in reference to pains, aches, &c. The esculapian is supposed, or pretends to know all about them from the pulse. The wonderful pulse, according to his theory, tells everything, and in all certainty he understands nothing whatever of the circulation, and but little of the internal structure of the human economy. How can he, it may be inquired, for he has *never seen* the inside of a dead body, i. e. the person of a man, or woman.

The amount of their written information, (and this as we have already seen, is known only to a few of them,) respecting the several organs, is exhibited in the extract given below, taken from a book on anatomy, there being no work extant on the specific subject of physiology.

"The heart in shape is like the bud of a water lily; it lies with the point downwards, having three folds at the lower end, and is situated in the middle of the breast; it contains about a handful of blood."

"The liver of a *wise man* is thin and divided into three lobes: the unwise have large deformed livers: the liver is on the right side under the heart."

"The first spleen is in contact with the bowels; it is eight fingers in length, and in shape is like a cow's tongue. The second spleen is on the right side of the liver."

"There are three kinds of lungs, red, black, and spotted; they are situated in the breast above the liver, and are in shape like the fruit of the "*thapan*," (mirobalans.)

"The intestines of a man are thirty-two cubits long, those of a female twenty-eight cubits; they are coiled up in twenty-one folds below the opening of the breast."

"There are two descriptions of gall; one is contained in a bag, in contact with the liver; the other is diffused through the whole body."

"The human frame is also filled with pus."

"Perspiration exists in the orifices from which the hair grows."

"The spittle flows from the pouches on each side of the jaws."

Here is a specimen of jumbling of the most finished touch. The liver is again honored by having allotted to it the lodging place of wisdom. The first spleen must be the pancreas, but how the spleen itself could be assigned to the right side it is not easy to conjecture. The urinary organs seem to be entirely overlooked in this description.

But we must follow the doctor in his practice. Shampooing is a favorite auxiliary in the treatment of disease. It is put into

operation at once. The physician himself squeezes away in every direction; hands, arms and shoulders, feet, legs and thighs, as well as the trunk, all get a share of attention. A dose is then administered to the patient, mixtures being more commonly given than pills. The nostrils are then plied well with some aromatic powder. Next, a charm is formally applied to the neck, wrists or ankles. Certain offerings are proposed to be made to the "*nats*," or evil spirits. And whether fever or inflammation be present, exhaustion or languor, or anything else, it matters not what, the patient must be stuffed, as a part of the treatment, with quantities of boiled rice. It is given in boluses the size of a peach. The doctor, looking very grave and stern, informs the sick person and his friends, that "*unless he eats he must surely die.*" The whole proceeding, from first to last, would be regarded by a lover of the stage, as a beautiful farce, divested of all appearance of a plot, but full of action and droll amusement.

The treatment pursued is highly stimulating. Emetics and cathartics are very rarely used. There is a horror of having the bowels moved freely. When the natives seek the aid of a foreign practitioner, they often inquire whether the dose he gives will purge. Frequently the dose has been handed back, when told that it would, with a very significant nod of the head and the exclamation, "*Ah! ma kom boo*," which means, "*Ah! that's very bad.*" Their last deity having been carried off in consequence of a looseness, seems to awaken in them a strong suspicion in relation to the fatal nature of free abdominal evacuation. In addition to this historical circumstance, their own purgatives are of the most drastic, violent character, and being oftener administered without, than with, either judgment or caution, is perhaps a sufficient cause to create a general dislike to them among the people. Though this is the popular opinion of the present age, it was not the universal rule of antiquity, as is manifest in some of the old treatises on practical medicine still extant, in which they figure in common with other things. In combination with a number of stimulating ingredients, their formula for certain compound preparations occasionally display the presence of some active cathartic article.

A composition of this sort is presented in the following recipe. The prescription as recorded, is directed to be employed in bowel complaints and pains in the abdomen. It betrays the exciting nature of the remedies, to which they were and are still accustomed to resort.

"Capsicum,	(Bird-eye pepper) fruit,	(quantity illegible.)
Piper longum,	"	100 grains.
Amomum Zingiber,	root	100 "
Allium Sativum,	"	100 "

Anethum fœniculum, - - - - - - - - -	seed	100 grains.
Croton Tiglium, - - - - - - - - -	"	10 "
Gentiana Chirayita, - - - - - - - - -	root	10 "
Myristica, - - - - - - - - - -	fruit	10 "

"A quantity of Cactus triangularis to be sliced, the juice drawn from it and thrown away. The remaining part should be added to the above, and both well triturated together. To be taken in quantities of——* grains when required. Previous to taking this medicine, it must be dipped in salt."

Besides the efforts of the regular practitioners thus put forth in behalf of the sick, the agency of quacks and silly old women is sought, when the illness of a person is supposed to depend on mischief perpetrated by imps, wizards, hobgoblins and evil spirits. All kinds of mental alienation and disorder are laid at their door, as likewise diseases of a lingering character. The women thus called upon to exercise their craft, for the removal of these imaginary phantoms and spirits, would remind one very forcibly of the poor creatures described by writers on "Demonology," that were burnt as witches and wizards in Scotland and England, during the reign in those countries of superstition, religious intolerance and persecution.

The ceremony for dislodging these pernicious invisibles is somewhat ludicrous. A sort of shrine, with silver and marble images, leaves and flowers, is erected on a raised platform of bamboos. Before it are deposited the different offerings, in cups and on plates. An elderly female is dressed up fantastically, in tattered garments of singular shapes and colours, and decked out with wreaths of flowers and feathers. She holds in each hand a long sword; and in front of the shrine, cutting all manner of antics and capers, she dances to music. This mystical ceremony is sometimes prolonged through the period of a whole day and night, or a couple of days, by the appearance now and then of the female referred to, and of a succession of comical fellows, who dance in the same way, and kick up no uncommon kind of shindy. By looking at them, one is irresistibly led to exclaim, O what stupid infatuation! What worthless folly of concerted phrenzy and vain hope!

To judge from what an observer will witness, relative to the feeling entertained by the people toward their own medical men, the conclusion is, that they do not appear to have any great confidence in their skill, or modes of practice. The Burmese are indeed very fickle in this respect. They somewhat unreasonably desire to see *speedy* results for good, follow the employment of medicinal means. They soon become discouraged, and quickly relinquish hope, if such do not turn up. At times as many as a dozen practitioners may be called in attendance on a case, in the

*The quantity directed to be given is not legible in the original.

course of a single day, and dismissed one after another, as soon as each one has administered his dose. If the patient die while the last physician is in the house, *he gets the name of having done the business.* His predicament then is anything but agreeable or pleasant. The poor fellow sneaks out, amid the noise and lamentations that are raised, as if he had by some unhappy blunder really committed a murder.

The Burmese burn their dead. Young children alone are buried. Ordinary funerals are solemnly grand. In burning a priest there is great display made. In speaking of the decease of aged persons, they compare it by a figure of speech which they use, "*to the dropping of ripe fruit from a tree.*"

Here I must close the subject, not because it is exhausted, but from an apprehension of wearying my readers. Imperfect and rambling as this sketch may seem, an inquirer can gather from it *some* of the more prominent facts connected with the present state of Medicine in that interesting kingdom of Asia.

NOTE. The translation from Burmese into English of the several passages quoted in this paper, was made by a gentleman distinguished for his acquirements and knowledge of the literature of that empire.

A case of Serous Effusion in the Theca of the Medulla Spinalis.

By H. T. CHILD, M. D.

I was requested on the morning of the 11th inst., to see R. D. S., male, aged twenty-six. I found him sitting up, and obtained the following history of his case. He had been exposed to a severe rain, two days previously; and on the afternoon of the 10th he was attacked with paralysis of the lower extremities, so suddenly that he fell over while engaged at business. When I saw him at 9 A. M., the paralysis had extended so as to partially interfere with the motions of the upper extremities; sensation appeared natural; his pulse was about 80; there was no apparent tenderness on pressure along the spine; he had passed his urine freely within an hour; his speech was somewhat affected. I directed a cathartic of extract of Colocynth combined with powdered Cantharides.

At 3 P. M., my friend Dr. C. H. Bibighaus saw him with me, and we found that, soon after I left, he had lost the power of deglutition; his pulse was now 88, and rather oppressed; we directed free cupping along the spine and a blister to the nape of the neck; in the evening the pulse was 100; he had swallowed nothing, but was profusely salivated and had been all day, the cause of which we were unable to trace. I emptied the bladder

by means of the catheter, and directed an enema of infusion of senna and tinct. of aloes.

On the morning of the 12th, Dr. Noble saw him in company with Dr. B., and myself; his pulse was 96; he had had his bowels evacuated by the enema and had passed his urine; his mind was somewhat affected; sensation natural; constant restlessness and desire to be moved. We directed sixteen ounces of blood to be taken, by cups to the spine, and a repetition of the enema. At 1 o'clock, P. M., his pulse was 120; skin hot and dry. I passed a tube into his stomach, and injected a gill of milk and water; he said he felt refreshed; from this time he sank rapidly; his breathing became hurried and stertorous, and at 7 P. M., he died, about 50 hours after the first appearance of disease.

A post mortem examination was made thirty-six hours after death, by Dr. Bibighaus and myself—Dr. Noble being absent from the city. We opened the spinal column in the lumbar region, and found it filled with transparent serum; the theca was somewhat softened, and there was atrophy of the medulla spinalis. We were not able to examine the condition of the brain and other viscera.

On the Treatment of Young Permanent Teeth, that require Plugging. By J. F. B. Flagg, M. D.

In the course of a series of microscopic observations upon the human teeth, in which I have been engaged for more than two years past, I was early led to observe the striking difference of density in the bony portions of teeth of different ages; particularly in their more external parts, as the bone approaches either toward the enamel or cortex.

In two preparations, consisting of transverse sections at the neck, one, an adult tooth, the other of the age of eight years, I have observed this peculiar development most decidedly illustrated. A section of the older tooth being prepared sufficiently to allow the light to pass between its pores, when subjected to a powerful lens, presented a uniformly fibrous, or striated appearance, from the edge bordering upon the chamber of the nervous pulp, quite to its outer surface, with the slight exception of the *cortex* at this part of the tooth; that being beautifully defined by its clustering stars.

A similar section of the young permanent molar, although it appeared equally opaque as the other at its *inner* portion, yet it gradually became less so, for about two-thirds of the way towards its outer circumference, when all its fibrous appearance was lost, and the external third became perfectly translucent.

Much difficulty has been experienced in the practice even of

our best operators in regard to saving these early permanent teeth. It is not unfrequently necessary to fill the same cavity twice or three times, at periods varying from one to three years, before we can confidently pronounce it to be an operation *lasting and permanently useful.* The probable reason for this is the change which is constantly progressing within the tooth, necessary to its growth and full development; the capillary tubes, in the immediate vicinity of the cavity so filled, evidently acting to its detriment. I think it reasonable to suppose that this condition may be superinduced by vital action being in contact with a foreign substance. Be this as it may, having pursued the following practice with uniform success, I recommend it to others desirous of benefiting the condition of young sufferers in this respect.

After removing every particle of decay, I devote as much time to *burnishing* the bony surface as is necessary to close the mouths of the tubuli opening into the cavity. This should be done with a smooth instrument, capable of reaching every portion of exposed bone, and with sufficient strength to cause the bone to present under the instrument somewhat the feeling of *enamel;* then wipe dry, and fill *full, solid,* and *finish.*

On the radical cure of Varices, deduced from the proximate cause. Explained and demonstrated in Two Memoirs, by Dr. Tommaso Rima; Ordinary Member of the Athenæum, Senior Surgeon to the Civil Provincial Hospital of Venice, formerly Chief Surgeon of the Navy, Clinical Professor, and Surgeon in Chief to the Military Hospital, of the late Kingdom of Italy. Rewarded with the Golden Medal of S. M. I. R., Ferdinand First, from the Royal Institute, for the invention of permanent and moveable swimming baths, &c., &c., &c. *Second Edition, with an appendix by the Author. Translated from the Italian,* by James Bryan, M. D., Lecturer on Surgery, &c., &c.

On Varicocele.

In the classification of the innumerable disorders to which the human organism is subject, some are alterations of tissue, which sooner or later according to the importance of the part attacked, tend to the destruction of life; others are so circumscribed in their effects, that they occasion only a slight alteration in the function of the organ or viscera where they are seated. Thus they sometimes disappear spontaneously, instead of increasing with advancing years.

But some of these occasionally remain within certain limits, and produce an amount of suffering disproportioned to the actual extent of the organic lesion. Of this number is Varicocele. This consists, as is well known, in a morbid enlargement of the veins which con-

vey the blood from the testicle to the general circulation, coursing, enclosed and covered by the scrotum, along the spermatic cord, commonly in an irregular serpentine matter.

It will not be in place here to speak of the essential character of this disease, of the degree of alteration which the membranous tissues of the spermatic veins undergo, of the mode of distinguishing it from hernia of the omentum, or of other diseases with which it may be confounded. We will merely state, to fix it in its place, not to verify the disease, as all writers have asserted, one characteristic sign of Varicocele, which will distinguish it from omental hernia: it is, that the former developes itself from the testicle towards the abdominal ring, while the latter, or epiplocele, descends from the inguinal canal to the scrotum. A theory which is well proved by physiological and pathological laws, is not always established by a clinic, at the bedside of the patient. There is no doubt but that an epiplocele must descend from above, and pass the inguinal canal into the scrotum. But we cannot so certainly say that a varicocele must pass from below upwards, from the testicle to the ring. If we admit (for the moment) a new supposition, that the blood in varicocele may descend from the vena cava and renal veins, and oppose that which naturally ascends from the testicle to the spermatic veins. This symptom would cease to be pathognomic, and the obscure would become diagnostic. We will return to the argument when it becomes necessary to prove that such a supposition may be demonstrated by facts.

In the majority of cases, varicocele remains latent and innocuous. It is, for the most part, by mere accident that the most careful discover it under the fingers. It generally appears as a group of worms, covered by the integuments of the scrotum, merely inducing a sense of weight in the testicle, a dull sense of stretching in the region of the kidney, and this not constantly. The patient, half mechanically, supports his scrotum for relief. With this precaution he walks, rides, dances and undergoes any other gymnastic exercise without pain.

Our predecessors limited their prescriptions to a suspensory bandage, local astringents, bathing and cold water. The cure was merely palliative. We do not speak of certain empirical ministers of Hygeia, who applied various pharmaceutical preparations, whether sanctioned by experience and reason, or not, to all diseases.

All surgeons, who are not entirely unknown, will occasionally have patients present themselves to be relieved of varicocele. Some apply to us to relieve them of a varicocele, which is neither voluminous, nor incompatible with the uses of life. Here, it will not be difficult to convince the patient, that greater harm will result from the operation, than the benefit which can be hoped for.

Though it is true that this is the ordinary course of the disease, yet

it is very certain that, in some rare cases, pains and other symptoms arise where it is permitted to push the knife beyond the limits which antiquated scholastic precepts have in vain imposed on an illimitable art. The following is a case in point:—Antonio Morbiato, of Venice, writer under the royal pretorship, in the parish of Cadore, came to this country in July, 1833, to place himself under my care for a varicocele in the left testicle—a more frequent seat of this disease than the right.

He had arrived at the thirty-second year of his age, and had no appearance of want of health. For ten years past the varicocele had been so decided as to exempt him from military duty. But it continued so mild as not to interfere with his running over the Alpine rocks of the Cadorino in the chase, which was his favourite amusement. Not until November of 1822, (writes the patient) did the first painful sensation pass along a varicose and tortuous vein, which had ascended towards the testicle, swelled so visibly as to exempt me from military conscription, for the six months previous.

On consulting a physician he recommended to me the use of cold bathing in water and vinegar, with the occasional use of the suspensory bandage. He did not, however, give up his favourite exercise, the chase, or restrain himself from indulgence in that which his vigorous age inclined him to. Fortunately, notwithstanding this violent exercise, after a time the painful sensation left him so completely, that he was enabled for seven years to follow his Alpine course.

The slight pain was confined entirely to the enlarged vein, whose swelling increased by exercise, and particularly during four or five days in the spring of the year. With this slight variation, the life of our patient continued up to 1833. It must be recollected that in March the disease increased continually, but with little pain. The means first resorted to, with repeated leeching, were insufficient to impede its progress, so that in the middle of July he writes, his life had become burdensome, since he was constantly confined to his bed, full of pain and fit for nothing.

The cure was not completed on the 20th of July. The infusion of digitalis and guaiacum, locally applied, diminished for a time his sufferings, but was not sufficient to induce me to expect a cure, without the repetition of leeches. Scarcely had he abandoned the horizontal position, ere his pains recommenced. It appeared, and was a fact, that the blood, in opposition to the natural laws of the circulation, was not moved by the abundance of that passing through the spermatic veins of the testicle, but condensed into one column, in a manner to compress materially by its mass the spermatic nerve. Hence came the unpleasant sensation about the kidney, and not by the other filaments of the mesenteric plexus of the great sympathetic and of the lumbar nerves. To the advantage of the horizontal position, he added, temporarily, that of cold, and of the constant application of

guaiacum. This, operating as a mechanical astringent, must necessarily corrugate the vascular tunic on the slow moving column of blood, diminishing its volume and the capacity of the tunic. Such an impression of cold diminishes the chief pressure on the nerves. The sensation is reduced by the action of this agent to an unpleasant sensation of weight and stretching. Changing the supine position of the body exacerbates the suffering. To the most painful, excruciating, and insufferable physical sufferings of the patient, are added severe mental distress; hence, he writes that he is tired of his existence. He is in such a state that he demands succour and efficacious relief. The destruction of the testicle offers, according to the usual practice, the only hope of a cure, but with a painful sacrifice.

The patient will not object, nay, he will implore the operation. But the surgeon of the nineteenth century should not perform it. The radical cure of varices of the leg has been practiced by us in different ways, and repeatedly during the last twenty-six years. In spite of incision, ligature, and the excision of a portion of the saphena, though the result has not corresponded entirely in all, varying in different cases, yet it is proved that the venous circulation has received no harm. This reflection has induced the idea, that as in the great saphena, so in the spermatic veins, no harm can occur. It is true, that these being isolated by a very slight adhesion to the cellular tissue of the scrotum, do not present the most favourable combination in connection, with an infinite number of smaller ramifications. We might fear that if varicocele were formed by a morbid alteration of both the spermatic veins, with the excision of a portion of these the blood of the testicle could not be conducted into the current of the general circulation. As a consequence we might have the disorganization of the testicle. We must be prepared for this accident. But why be not willing to trust the hazard of the operation? The following reflections have induced me to attempt it.

Scarpa has demonstrated, in a masterly manner, in the arterial apparatus, the system of compensation which nature adopts when a vessel has been obliterated, either artificially or by disease. There is reason to believe that, to a certain extent, this physiological and anatomical law is also active in the venous system. If the rule be correct, that greater evils follow the lesion of an artery than that of a vein, it will apply with much more force to operations on the spermatic vessels. There are two veins devoted to this function, besides the artery. This carries the blood for the nutrition of the testicle, and also the principle of which is composed, and from which is elaborated, the first element of life, the semen. The veins have but a secondary office, that of carrying again into the current of the general circulation the residuary blood, in order to be deprived of its carbon and to reacquire its lost oxygen. The venous blood (to avail my-

self of a trivial idea, but one adapted to my purposes) is the serous portion of the milk, from which is extracted the caseum and buttery portion. The spermatic artery runs in the central part of the cord, while the veins course in a serpentine manner on its external surface. A portion of a vein may therefore be cut without wounding the artery. In cures by injection or ligation of the spermatic vessels, those of the scrotum and dartos coming from the femoral and obturator arteries, join with those of the involucre of the testicle to support its vitality. We may not perhaps expect the secretion of the semen, on account of the smallness of these external vessels, or perhaps the blood of these vessels does not contain the prolific principles which form the elements of this fluid. In our case, of treatment by incision of the veins, where their action is simply secondary, and restricted to carrying the blood, already deprived of its principal elements, these vessels may, on account of their tenuity, carry on the function in substitution of the spermatic veins, when the latter are entirely destroyed. As the two veins correspond to one artery, each of which is larger than the artery itself, we must hence admit, that the venous circulation is more certain than the arterial. The compensation to the venous system may be the lymphatic vessels. Besides performing their own functions, these vessels may carry venous blood. From the experiments of Lippi, and the controversy of Rossi, we are informed that there exist direct communications between some of the venous and lymphatic vessels.

The operator and patient being agreed, it was decided to commence with the incision of the varicose veins alone, and to cut successively the artery and vas deferens, should the sacrifice of the testicle become indispensable.

Such an operation, sanctioned by a distinguished practitioner of this city, was in fact directed on the seventh of August, 1833, with the assistance of Dr. Trevesini, royal fiscal physician. A transverse portion of the integuments was elevated, from which a perpendicular incision about two inches in extent was made. Raising with a pair of forceps the fascia of the varicose veins, three incisions were made with a pair of scissors, for the purpose of exposing the veins which surround the vas deferens. The third incision was much the most painful, corresponding to the track of the vein, whose great pain induced the patient at any risk to submit to the operation. There was no necessity for ligatures on the vessels; the hæmorrhage being purely venous, ceased spontaneously. The wound was dressed with a linen cloth tempered with oil and lint, spread with a refrigerating ointment. No phenomena worthy of notice were developed, the pulse scarcely indicating fever. Forty-eight hours afterwards, the wound was dressed with little or no inconvenience to the patient. This could not be said three hours afterwards. Severe pains attacked the patient, ascending from the lower part of

the wound to the region of the kidney, which were increased by the least motion of the body; so that the patient was reduced to a tetanic immobility imploring assistance. The pulse was depressed and jerking, subsultus tendinum, extremities cold; eyes sunk; hippocratic countenance, with cold sweats, were the symptoms presented. The calm through which he had passed for fifty-two hours, after the operation, did not indicate a scene so alarming. This sudden and violent attack was a speaking proof, that the deleterious influence of some morbid agent was acting upon the nervous system. Could it be the atmospheric air admitted for an instant during the last dressing? Assafœtida with morphia internally; an embrocation of oil and morphia to the wound, with the application of guaiacum to the groin and to the renal region, were the means resorted to, during two days of great suffering; also, a blood letting with the application of leeches to lumbar region, as soon as vital reaction would permit. All the so-called nervous symptoms having subsided, about the third day, general inflammation attacked the wound and vicinity. Moderated by the abstraction of blood, digitalis and local applications, intended to reduce vascular action, a laudable and abundant suppuration put an end to the painful scene of this morbid process. The testicle which had remained safe during the storm, became also, by the affusion from the wounded part, inflamed, and was the seat of a collection of fœtid pus, in the tunica vaginalis and albuginea, which discharged spontaneouslythrough the wound. From this time the ulcer progressed regularly, and the cicatrix was healed early in September. Sig. Morbiato returned to the duties of his office, and soon after to his usual habits.

I have now finished the historical part of the operation. It remains to add certain reflexions, as well on practical surgery, as on the special pathology of the veins. When the intolerable pains of our patient induced him to submit to the operation, we were not aware that others had performed it. The common practice, supported particulary by the authority of Boyer, has been the demolition of the testicle. In the history of medicine we learn that various varicose tumours have been extirpated by good surgeons. Petit has excised two, one of which he calls lymphatic sanguineous varicocele. The other, which was much less, he excised from the cord. A third was eradicated by my friend and colleague, Dr. Cumeno, of Trieste, from a French military surgeon, who does not speak of simple varices of the spermatic veins, but of varicose tumours. These tumours may form independently of the veins. We know that cancer from its nature produces varicose veins, and there is cancer of the varices. From the small vessels of the scrotal membrane, one of those inorganic fungous productions may arise, which may have but a superficial, or perhaps no attachment to the spermatic veins. If this were known it might be extirpated, leaving one of

the two untouched. In order then to arrange the facts and suppositions above written, we have proved—

1st. That varicocele, under ordinary circumstances, is a disease of little inconvenience, yet occasionally it becomes so painful as to render it intolerable, and to demand the assistance of the surgeon.

2d. That varicocele may be radically cured by the excision of the varicose mass, without the destruction of the testicle, as was the practice of our predecessors.

3d. That the serious consideration of surgeons should be directed to the theory of varices, to know whether generally, or in some solitary cases, the disease takes place, or is maintained by the blood which flows back from the great veins. This should be suspected by writers on varicocele, as I have sufficiently demonstrated in a letter of December 29th, 1825, speaking of varices of the lower extremities. Whilst I operated on the seventh of August, 1833, Sig. Dufresne published, on the 27th February, of the present year 1836, in the Journal Hebdomadaire, a memoir containing various operative processes for the radical cure of varicocele. He refers to the practice of the ancients, who tied the vein above or below the varicose group; he does not analyse this operative process and give the rule, but merely writes it as a historical fact.

We learn from this memoir that the learned physician, our colleague and friend, Professor Delpech, the unhappy victim of the ingratitude of men, has operated several times, with happy results, by the excision of the varicose spermatic veins. Nevertheless, one is surprised that he adheres to the opinion of Boyer, preferring semi-castration. The result is certainly not less doubtful, and the sacrifice is too painful, especially if the patient be in the bloom of life. He then proceeds to give us the opinions and various processes of Breschet, Velpeau, Friche. They attempt in various ways to obtain their purpose without cutting the integuments of the scrotum, and without exposing the vein. Breschet uses a pair of pincers, which somewhat resembles the compressor of Assalini. The vein and a portion of the integuments of the scrotum being introduced between its two branches, they are pressed together so as to bring the parietes of the vein in contact. The others use a needle to perforate the vein, and carry a thread to act as a seton, allowing it to remain two or more days. Others with a greater probability of success, on a needle which has passed through the integuments of the scrotum, under the vein, twist a thread in the figure of 8 form, or else retain the vein in constant compression between the needle and the thread, as is done in hare-lip.

Several cures have been obtained by these processes. He cites among others as authority, the name of Velpeau. But they seem to us not to unite the cito, tuto et jucunde of Celsus, and should

not supersede simple excision. It is certain that this pricking terrifies the patient, nor when accomplished is the pain relieved. By incision the pain is transient, and the operation decisive, and is finished in a few seconds. We cannot say so much of the strangulation of the vein between the needle and thread. This occasions a little pain at first, but the pain must of necessity continue to increase, indeterminately, for several days; nor can we know in anticipation or perhaps in reality, to what extent, and how long a time it will continue and excite inflammation, as we will not have the power of limiting it to the simple grade of adhesion. The excited sensibility of the vein does not remain circumscribed to the point compressed. It extends easily along the vein, and there is danger that phlebitis will extend to the larger trunks, endangering the life of the patient. Nor is the inflammation confined to the vein. The integument and other parts which sympathise with it are likely to participate. It is not uncommon for gangrene to attack the integuments which surround the points compressed, and killed, by the pincers or by the needle and thread.

Resection, on the other hand, induces some loss of blood, which depends upon the operator favoring it or not, so that the inflammation of the wounded part may be circumscribed, which cannot be done with compression. Strangulation of the vein does not give confidence to the patient, who perceives always the uncertainty of the cure, without knowing the extent of suffering. Nor should we be surprised if after three or four days the sufferings of the patient should induce the surgeon to relax the compression, leaving him exposed to all the results of the experiment, which are not only useless in effect, but always pernicious, and may induce grave consequences.

In excision, the patient may be compared to a ship in a troubled sea, the wind having ceased to blow; while compression may be compared to a vessel which leaves the shore, throwing itself into an ocean, soon to suffer all the effects of an inevitable tempest, whose duration or termination canot be surmised.

Should the patient have enough of courage and patience to resign himself to events; uncertain whether adhesion will take place, or how much time must pass ere its accomplishment, well; if not, he will consider the operation a total loss. If it is performed in a place which may be obliterated, we may not obtain cure on account of the anastomosis of the obliterated vessel. If the varicocele is in both veins, the operation must be performed the second time, uncertain still whether compression is applied to the remaining vessel or to that which has been operated upon. Facts, in fine, in the cure obtained by strangulation, have proved, as has been said by Dr. Dufresne, that we always have more or less sup-

puration. Nor can we guarantee the patient from the danger of secondary hæmorrhage, which, without the degeneration of the wound, cannot take place after excision of the vein. Subjected to an impartial examination, and placed in opposition to the advantages we may hope for, and the dangers we may fear, it appears to us that excision of the varicose veins merits the preference without regard to the choice of the patient.

Clinical teachers, who reason upon and compare the different methods, are authorized by experience, to form a judgment which will serve as a guide to the novice in the noble art of surgery.

BIBLIOGRAPHICAL NOTICES.

On Diseases of the Skin. By Erasmus Wilson, F. R. S., Consulting Surgeon to the St. Pancras Infirmary; Lecturer on Anatomy and Physiology in the Middlesex Hospital School of Medicine, etc. etc. *Second American from the second London edition.* 8vo. pp. 439. Lea & Blanchard. Philadelphia: 1847.

Although we have many works on Dermatology, we can hardly be said to have yet arrived at any great degree of accuracy in our diagnosis of the various affections, and, as a consequence, their treatment remains for the most part empirical and often unsatisfactory. The greatest confusion exists in the classifications of authors. Affections are described as distinct diseases, which often co-exist, or become blended, so as to bid defiance to all attempts at satisfactory diagnosis. With some, the *topographical system*, which divides the diseases according as they affect the head or the body generally, has been prefixed; but more generally the system of Plenck, modified and improved by Willan, was for a long time adopted. It consists of *six orders*, characterized by the appearance of the eruption, which, instead of constituting the disease, is in fact merely one of its products. To this succeeded the so-called natural system of Alibert, which embraced all cutaneous diseases in one

group, under the name of *Dermatoses.* This constituted the trunk of his "Arbre des Dermatoses," the sub-groups being its branches. Although its gifted author assumed this to be the *Natural system*, in opposition to that of Willan, which has been designated the "*Artificial system*," it was really not any more simple, and hardly more correct in reference to the phenomena of the varions affections. The great fault of Willan was in endeavouring to carry out the principles of division and subdivision pursued in Botanical and Zoological classifications; as if any analogy could exist between morbid conditions of a part of the human body and the natural or organic structure of plants and animals. In the attempt, affections the most dissimilar, as purpura and scarlatina, scabies and variola, were arranged together; whilst some of the most analogous, as variola and varicella, were separated. Our author adopts a new classification of his own, which he likewise proposes to call a "*Natural system*," though it differs greatly from that of Alibert, and is, we think, with much greater reason entitled to that character. According to Mr. Wilson's arrangement, Diseases of the Skin are thrown into four groups, viz.: 1, Diseases of the Derma; 2, Diseases of the Sudoriparous Glands; 3, Diseases of the Sebiparous Glands; 4, Diseases of the Hairs and Hair Follicles.

What is called the skin, consists, as we know, of various structures, having their appropriate functions; and this classification has reference to the particular organs of the skin which are especially implicated. Disease in these several organs again is various in its character; thus we have inflammation, which may be either specific, non-specific, asthenic, sthenic, &c. &c.; augmented secretion, diminished secretion, retention of secretion, &c. &c. Hence, the classification is based on the distinct anatomical characters of the organs involved; which certainly is the most natural ground of separation. The particular character of the diseased action which occurs in these different structures, forms again a very natural and proper ground for subdivision.

If this classification were generally adopted, and we think it will be, it would do much to remove the confusion which exists in the diagnosis and pathology, as well as the therapeutic management of cutaneous affections.

The first chapter of the work contains an admirable account

of the "Anatomy and Physiology of the Skin," embracing all the modern microscopical discoveries of the intimate structure of the derma, epiderma, and the included organs. This constitutes an appropriate, indeed, indispensable, introduction to the study of the diseases of which the work treats.

The concluding chapter contains a "history and description of the *itch animalcule*, or acarus scabei," and a "history and description of the *steatozoon folliculorum*," embracing some original and very curious observations.

We have read this edition of Wilson on Diseases of the Skin with unusual interest, aad cannot hesitate to recommend it as the most complete and satisfactory work on the subject now extant. The value of the volume is much increased by the excellent illustrations it contains; these consist of eight highly finished plates, representing groups of diseases, and comprising in all sixty-one different affections.

A Treatise on the Structure, Diseases and Injuries of the Blood-vessels, with statistical deductions; being the Essay to which the Jacksonian prize for the year 1847 *was awarded by the Royal College of Surgeons of England, with numerous additions.* By EDWARD S. CRISP, M. R. C. S., Member of the Council of the Pathological and Medical Societies of London, &c. &c. 8vo. pp. 354. London: 1847. *With five Lithographic Plates.*

The structure, diseases and injuries of the blood-vessels is an interesting topic to the physician and surgeon, but to the latter more especially: and we are, therefore, not astonished that it should be made the subject of a prize essay by the Royal College of Surgeons of England. From Mr. Crisp's account, fifty-two deaths occurred in the British metropolis in 1846 from aneurism; and according to the Report for 1840 of the Registrar-General, one hundred and forty-seven persons died from aneurismal diseases in England and Wales for that year,—a small proportion, certainly, for so large a population, when we compare it with the number of aneurisms in one year in the metropolis.

Two works on the diseases of the blood-vessels have been chiefly known amongst us:—one by Mr. Hodgson, of Birming-

ham, England, which was published upwards of thirty years ago; and that of our countryman Professor Nathan R. Smith, of Baltimore, on the Surgical Anatomy of the Arteries, the first edition of which was published about fifteen years ago. Both of these are valuable productions—doing great credit to their authors; but still there was sufficient room for the Essay before us; and the fact that it received the prize awarded by the Royal College of Surgeons of England for the year 1847, is sufficient evidence of its being possessed of real merit. Mr. Crisp states, that he has, for many years, paid much attention to this class of diseases, and that his residence in the neighbourhood of two large hospitals has afforded him many opportunities for witnessing operations, and watching the progress of these affections.

The descriptions of the different diseases are those generally received, although they are in some cases too brief. The pathological deductions are usually accurate; whilst the treatment is judicious. The author has taken considerable pains, too, in obtaining statistical details;—for instance, one single table of 551 spontaneous aneurisms, (so called) selected indiscriminately from the British Medical and Surgical Journals from the year 1785 to the present time, occupies a space of nearly forty closely printed pages. The table contains the authorities for each case, the age, sex, artery affected, habits, occupation, supposed cause, &c., operation, termination, cause of death, &c., and the name of the practitioner under whose care it fell.

To the work are prefixed five lithographic plates, the first representing an "arterial tree;" indicating by figures the order of frequency of the different situations of aneurisms; the others elucidating the structure of arteries, and certain lesions of the vessels. They are not signally good specimens of art.

Criticisms and Controversies relating to the Nervous and Muscular Systems. By BENNET DOWLER, M. D., of New Orleans. *Reprinted from the New Orleans Medical and Surgical Journal, Sept.*, 1847.

This is a *brochure* of 69 pages, and racy enough for any palate—rather too spicy, indeed, for our taste.

On different occasions we have noticed Dr. Dowler's labours in terms of just praise. His experiments on the *cadaver*, in relation to caloricity and the influence of the nerves in causing muscular contraction, we regard as ingenious, and their results strange and inexplicable, according to present received physiological laws. These experiments, Dr. D. maintains, completely upset Dr. Marshall Hall's theory of reflex nervous action. This has drawn down upon his head the thunder of some of the admirers of the reflex doctrine, and the present publication is Dr. Dowler's rejoinder. It will not be denied, even by those who may not agree with the author in his reasonings, that his publication displays much learning and ability, but a sad want of the calmness of true philosophy. We admit that he has had great provocation. His experiments have been lightly spoken of, and his deductions have been put aside with a flippancy calculated to ruffle one unused to such encounters; but in losing his temper he sacrifices an important element in the controversy. We agree with him in thinking that he has not been fairly dealt with by his opponents. His experiments have been numerous, laborious, and seemingly accurately observed, and until others in an equally pains-taking manner have gone over the same ground, with different results, we are bound to regard them as true. No one, as far as we know, has denied that they are true. That being the case, his opponents are bound to show either that their theory is consistent with the facts, or that the facts stated are inapplicable to the case—in other words, that Dr. Dowler's deductions from his own premises are wrong. Thus far, ridicule rather than argument has been the weapon mostly employed against him.

THE MEDICAL EXAMINER.

PHILADELPHIA, NOVEMBER, 1847.

MEDICAL APPOINTMENT.

In the notice of recent medical appointments contained in our last number, we neglected to mention the election of Jacob Randolph, M. D., as Professor of Clinical Surgery to the University of Pennsylvania. Dr. Randolph has long been one of the Surgeons of the Pennsylvania Hospital, and his lectures will continue to be delivered as heretofore, in that institution, to all its pupils without distinction. We have not understood that he is to lecture at the University, or specially to the class of that school, so that all who choose to purchase a hospital ticket will have the benefit of his able instruction during the winter.

THE ANNALIST.

We have received the second number, (first missing,) of this spirited little cotemporary, from which we discover that it has entered upon its second year, which is encouraging in these days of mushroom growths. The editor wields a ready pen, and is enthusiastically devoted to the interests of the profession. Long may he grace the editorial tripod!

The New Jersey Medical Reporter and Transactions of the New Jersey Medical Society. Edited by Joseph Parrish, M. D., Tenth month (Oct.) 1847. Burlington, N. J.

This is a new aspirant for professional favour, which has just appeared, and is to be published quarterly, in the city of Burlington, N. J. It "purports to be a medium for the publication of the transactions of the New Jersey Medical Society, while it will be devoted to the interests of Medical Science generally." The present number contains eighty-four pages, well printed, with good paper and a genteel cover—circumstances that speak well for the good taste and spirit of the publisher.

A considerable portion of the initial number is occupied with the proceedings of the New Jersey Medical Society, embracing reports

of Committees and papers read before it by members: the remainder is devoted to original articles, notices of new publications, and selected matter. A journal got up under the auspices of a large Medical Society, as in the present instance, with the auxiliary means at the command of the editor, ought to succeed, and we can see no reason why it shall not. In this we assure our young friend, the editor, "the wish," at least, "is father to the thought."

YELLOW FEVER.

According to the last accounts, the yellow fever continues to prevail in New Orleans, especially among the unacclimated. The influx of strangers has caused in fact quite an increase in the number of cases. "During the twenty-four hours ending on the morning of the 11th, (ultimo,) nine interments occurred in the city, and five deaths at the Charity Hospital." This, however, is a great decrease, compared with the month of August. In the latter part of that month, the disease pervaded all ranks of society, and the deaths from that cause alone, in the week preceding the 23d, amounted to three hundred and twenty-four.

SHIP FEVER.

This epidemic still prevails to a considerable extent among the emigrants at the port of New York, although very few cases we believe occur now at Philadelphia, owing, perhaps, to the smaller number of subjects. From the Canadian ports and places of landing, we continue to receive distressing accounts of destitution, disease and deaths among this unfortunate class. The number of sick emigrants at one hospital, (Montreal,) on the first of last month, was eight hundred and thirty-five!

MEDICAL HEROISM.

Under this caption, the *Annalist* copies the following from an article in the *British and Foreign Review*, with appropriate comments. It is a sublime but just picture of genuine medical character.

"There are few of our readers who do not remember the melancholy impression made on the public mind by the disastrous expedition to the Niger, when this was made known in England, through the newspapers. And none, who remember this, can forget that pathetic passage in the story, which represented the noble conduct of the surgeon and the geologist of the expedition, when left alone in the far recesses of the Niger, amid their heroic companions, all stricken to death, or to death-like helplessness, by the fatal fever of the country. In this trying conjuncture, when the salvation of all on

board depended upon the speedy removal of the ship from her actual position, Dr. M'William took the navigation on himself, steering with his own hands, and piloting the vessel through all the intricacies of the river, while his companion worked the engine below. There is something affecting, we had almost said, sublime, in the picture thus presented to the imagination, of these two solitary men of science, assuming offices so foreign to their past habits and knowledge, stripped of all exterior cognizance of their class, standing as humble workmen at the helm and furnace, toiling by day, watching by night, while the force of the stream and paddles were sweeping their ill-fated bark, freighted with their dying or dead companions, through the manifold dangers of their unknown course. The author of the volume before us, (the Report on the Boa Vista Fever,) was the clear-headed and stout-hearted pilot who did this, the undoubted preserver of the ship and her surviving crew; and the slight and simple way in which he speaks of his own exertions, strikingly illustrates the old truth, that 'the brave man is ever modest.'"

The following despatch and accompanying remarks, which we extract from the North American of a recent date, show that the same traits characterize the honorable members of our profession everywhere.

MARTYRS TO THEIR DUTY.—The crowded state of our columns has prevented us from commenting upon the following dispatch received at the Navy Department from Com. Perry:

U. S. FLAG SHIP GERMANTOWN,
VERA CRUZ, 6th September, 1847.

SIR:—I am again called upon to announce to the Department the death of another valuable officer of the Squadron—Passed Assistant Surgeon J. Howard Smith breathed his last yesterday evening at the Naval Hospital.

The death of this and the other Medical Officers, may in part be ascribed to the extraordinary anxiety and labour to which they were subjected in their attendance upon the sick; worn out in body, though not in zeal and courage, they had not sufficient strength to bear up against the effects of disease when it came upon them.

Doctor Smith was attached to the steamer "Spitfire," and volunteered with Doctor Hastings, of the "Mississippi," to take charge of the sick at the Hospital, when Dr. Thornly was taken with the fever.

Words cannot express my feelings on seeing these devoted men, stricken down as they have been by the epidemic, from the fatal malignancy of which their own incessant labours and watching by night and by day have saved so many.

As a proof of the noble self-devotion of Doctor Hastings—an example worthy also the character of his lamented companion, Doctor Smith—I subjoin an extract from the "Sick Report" of the 30th ult.

I have the honour to be, with great respect, sir, your obedient servant, (Signed) M. C. PERRY,
Commanding Home Squadron.

To Hon. JOHN Y. MASON, Secretary of the Navy, Washington.

Both the gentlemen, who are the subject of the above feeling eulogy, are Phildelphians, and Mr. Smith leaves many to regret his loss—while that regret is solaced by the reflection that he fell when nobly and gallantly engaged in the performance of his duty. It is not alone amid the roar of cannon and the thick smoke of a deadly combat that true courage and manly devotedness can be found. The physician who faces the horrors of infectious disease, and hovers like a ministering angel around the couch of death, achieves a triumph equal to that of the victorious battle field. As soon as Dr. SMITH was taken down, Dr. JOHN HASTINGS made the following tender of his services in a report dated "U. S. Naval Hospital, Salmadina, August 30, 1847."

'Aware of the diminished number of medical officers in the squadron, and fearing you might be worried and perplexed on account of the sickness of Dr. Smith, I conceive it my duty to say that I feel myself able to take charge of the sick at present on the island, (number of sick in hospital 124,) and all who will be likely to come. Having been on a previous occasion, from similar misfortunes, called upon to discharge as heavy and important a duty as the present without succumbing, I hope I shall in the present instance again be equal to the task.'

While engaged in the duties which he had thus assumed, Passed Assistant Surgeon JOHN HASTINGS was himself attacked by fever and for a long time his recovery was doubtful. Providence, however, interposed, and he has been preserved for other duties and other missions of self-sacrifice and devotion. Well may we feel proud to enrol such gallant spirits among the sons which Philadelphia has sent forth to the war. Tears for the departed one, and the encomiums of the public upon the survivor, are but feeble evidences of the estimation in which they are held. Dr. SMITH "sleeps the sleep that knows no waking, while Dr. HASTINGS will soon be restored to the friends whom he has made so proud of him, and we trust his return may be accompanied by some expressive token from his fellow-citizens."

The following notice of the late Dr. Kearney we also take from the North American. We had the pleasure of Dr. K.'s acquaintance and friendship, during several years that he was stationed at Philadelphia, and can bear witness that the eulogy of his brother officers is not strained. It will be seen that he met his death in the *voluntary* performance of a most hazardous duty. Dr. Kearney's age and long service exempted him from so arduous a task, but his sympathy for his brother soldiers prevailed over all considerations of domestic ease and comfort, and even his own health and life, and, like those whose names we have already chronicled, he fell a sacrifice to what he deemed his professional duty.

NAVAL.—The Officers of the Navy attached to this station, and

others now in Philadelphia, met at the Navy Yard, on the 22d inst. Commodore CHARLES STEWART was called to the Chair, and Purser ROBERT PETTIT appointed Secretary.

The Chairman, in a short and feeling address, stated that they had convened for the purpose of offering some testimonial of their respect, to the memory of a brother officer, Doctor JOHN A. KEARNEY, late "Fleet Surgeon" of the Home Squadron, who died on the 27th of last August, at Salmadina, in the Gulf of Mexico.

A Committee consisting of Surgeons James M. Greene, W. S. W. Ruschenberger, and Purser Robt. Pettit, was appointed to prepare a notice and resolutions, expressive of the respectful sentiments and feelings of the meeting. The Committee reported the following, which was adopted :

We are impressed with no common feelings of sorrow, when we reflect, that only a few short weeks have elapsed, since the lamented subject of this notice, was on duty with us, in fine health and spirits, and with every prospect of a long and useful life ; and that now he is numbered among the last victims of that disease, the fell scourge of strangers within the tropics !

We cannot permit an occasion so melancholy to pass, without a slight tribute to the memory of one with whom most of us have passed many happy hours, in our varied duties of a life at sea ; or amid the social circle, with our friends on shore.

Doctor Kearney entered the service at an early age, and during a career of nearly forty years, passed with distinguished honour through the various ranks of the Medical Corps of the Navy. He served as Surgeon's Mate, Surgeon, Member and President of Medical Boards, and Fleet Surgeon of different squadrons.

In the war of 1812 he was Surgeon of the Frigate Constitution, in her triumphant encounter with two of the enemy's vessels and a larger force.

The deceased was a warm advocate for strict discipline, and willingly showed the utmost deference for those whose rank or seniority placed them in command—while he used every honorable means to promote the consideration which he believed was due to skilful and well instructed medical officers. Nor was he less strenuous in his efforts to advance the interests of others in the different departments of the service ; and in 1835 had the pleasure to witness the passage of a law in Congress, improving the condition of every rank in the Navy.

Doctor Kearney was a noble hearted and generous man—he was a kind, affectionate husband, a tender parent, most sincere friend, and acquitted himself in all the relations of life, as a Christian and polished gentleman.

But it was in the exercise of his profession, either in the hospital, or on board his ship, that he was seen to most advantage—there, his whole time and attention were given to the sick, and no comfort or luxury was spared that could alleviate the sufferings of the patient, or tend to his recovery.

As friends of the deceased, we only join in the common expression

of sorrow, at the loss which his family, the public service, and society have sustained in the death of Doctor KEARNEY—and it is therefore

Resolved, That we sympathise with his family and relatives in their bereavement, and that we offer them our heartfelt regret, and most sincere condolence.

Resolved, That when time shall have assuaged the sorrows of his mourning relatives, they may direct his children to contemplate with becoming pride, a father's patriotism, his unsullied reputation, and the bright example of his virtues.

Resolved, That we appreciate his services in co-operating with the Army, in its struggle with the ruthless Seminole of Florida, and in *voluntarily* joining the squadron, now amidst disease and death in the Gulf of Mexico.

Resolved, That we will cherish with grateful recollection the memory of the deceased, as a skilful and efficient officer, a pleasing associate on duty, and as an accomplished gentleman.

Resolved, That these proceedings be signed by the Chairman and Secretary, and published in the papers of this city, and that a copy of them be sent to the Secretary of the Navy, with a request that he forward it to the family of the deceased, and also that a copy of it be sent to the Secretary of War, for Col. James Kearney, of the Topographical Engineers, only surviving brother of the deceased.

CHARLES STEWART, Chairman.

Robert Pettit, Secretary.

U. S. Navy Yard, Philada. Sept. 22d, 1847.

RECORD OF MEDICAL SCIENCE.

THE IRISH IMMIGRANTS' FEVER.

GROS ISLE, 33 miles below Quebec, August 27th, 1847.

To the EDITOR of the Boston Medical and Surgical Journal.

DEAR SIR,—Through the politeness of Mr. W. Stevenson, of Quebec, who runs a small steamboat for the government, I have been able to make a short visit to this quarantine station, and am now on my return to Quebec; or shall be, as soon as our little steamer takes on board the last of the convalescents from the fever hospitals, which I see waiting on the dock. Presuming that our brethren generally, throughout the United States, feel a lively interest in the disease which is prevailing here and up the St. Lawrence, even to our own country, I propose to give you a rapid and superficial sketch of what I have seen, and what I may hereafter see; although, as I have been travelling for more than two months, and seen but few medical journals, I do not know but others have already done for you what I am

about to attempt. If so, please send on my letter to my colleagues of the Western Journal, at Louisville.

Gros Isle is one of the endless succession of beautiful islands which adorn this noble river, from Lake Ontario to the Gulf of St. Lawrence. Many of them consist of ancient *drift*, and have level surfaces which rise but a few feet above the water; but this is rocky and rugged, with heights of 80 or 100 feet, in its centre, and hence the name given it by the early French voyageurs. Its breadth is less than a mile, with a length of nearly two. The black birch, white cedar, and various kinds of pine, overshadow and partly obscure its stony surface.

The quarantine station is on the south-east or right hand side, which, in the approach, present three distinct groups of one story board sheds, some of which are mere cottages, but others from two to four hundred feet long. The lowest, or eastern group, is for the reception and temporary accommodation of immigrants in health; the next up the island, for the quarantine physician, and a small detachment of troops from the garrison at Quebec; the third, or western, more extensive than both the others, for the sick and their physicians, nurses, and a numerous body of carpenters, engaged in the erection of additional houses to receive the hundreds who are still lodged in tents and marquees. The buildings of each group are white-washed, and appear in pleasant contrast with the green slopes and tuberosities of the island, in their rear. The harbor in front presents several ships at anchor, and two or three steamboats, with a neat and nearly finished dock, projecting to a distance into the stream. When we were near the harbour, a gentleman, Mr. Patten, who resides in its neighborhood, and who had kindly directed my attention to different, objects on our little voyage, called my eye to an Irish immigrant ship, then passing us. On inspecting the group of passengers with a glass, I was surprised to find them so healthy in appearance; and when about to express myself to that effect, he discovered and announced that it was a ship from Bremen. Such is the difference between the German and Irish immigrants, in health and personal condition.

A distant view of Gros Isle suggests a new and busy colony, on a romantic shore; but a walk up the dock, which leads directly to the hospital sheds, most painfully dispels the pleasing illusion. As I approached them, the emaciated forms and haggard faces of convalescents, sauntering about, or crouched on the ground and rocks, or sitting underneath the eaves, and on the piles of boards to be used for coffins, impressively told what might be expected within. Conducted by Mr. Patten, I passed through them without stopping, till we reached the quarters of Dr. George M. Douglas, the health officer, who received me with much hospitality. I found him lame, from a kind of hospital gangrene or slough, which had attacked one of his feet, but, intent on his duties, he was bravely hopping about, and answering a hundred questions, or giving as many orders.

Taking me in his buggy, he drove to his office in the midst of the sick, where I was introduced to several of his assistants, They are

chiefly young physicians of Quebec and other towns of Canada, employed by the government. One to whom I was introduced, although walking about, labored under fever; and yesterday I saw another at Quebec, who had returned in the same condition. The number of assistants to-day is nine. Since the first of June, twenty-one or twenty-two have been employed. All except Dr. Douglas, have experienced attacks of the fever, and three have died—one of whom was Dr. Frederick Cushing, formerly of the State of Maine. The exemption of Dr. Douglas is to be ascribed to his having already had the disease. After conversing awhile on its symptoms and treatment, Dr. Watt and Dr. Fenwick conducted me to their respective hospitals, embracing six or eight hundred patients, where I took such a *coup d'œil* of the sick as my limited time would permit, examining, with some attention, a considerable number in every stage of the disease. From a necessity which the Canadian government, up to this time, has been unable to avert, all the sheds and tents are crowded to such a degree, that one can scarcely turn round among the sick. Men, women and children, in all stages of the disease up to dissolution, are huddled together, and lying in the same foul and infectious clothes with which they started from Ireland; and which, no doubt they had worn, without change, for weeks or months before. The quarantine officers must not be blamed for this, since the means of classification and personal cleanliness are not within their reach. As to nursing, it is evidently in the lowest degree. Nearly all the nurses from Quebec have sickened, and the immigrants furnish but few from their own body. Their sympathies for each other are manifestly small—either never had an existence, or have perished under the combined influence of famine and filth. Examples of the well members of a family refusing to wait on the sick, are familiar to all the medical gentlemen; and a total indifference to the death of nearest relatives, is witnessed every day. Following their remains to the grave, or in any manner assisting in their interment, is not thought of. But one idea seems to be present with them, that of getting up the river. A man who had recovered, on being asked by some one, whether he was going to Montreal in the next steamboat, replied that he wished to do so, but was afraid his wife would not die in time. The family of a young woman who was ill, *sent* to know how she was before they started. On being expostulated with, they said it was not worth while to stay any longer, as she would no doubt die. Mr. Barter, the apothecary of the hospital, who is now by my side, going to Quebec on official business, confirms all that has been told me by others, and adds, as the result of his own observation throughout the summer, that the living seem more pleased than grieved by the death of their friends. My own limited opportunities suggest the same unwelcome conclusion; for I saw no aspect of sorrow; but a stolid indifference, or inquisitive gazing, at what might be passing around, both in the crowds of convalescents, and in patients not very ill, who lay in the midst of the dying. It is painful to record this testimony against human nature; but we ought to know

to what depths of degradation large masses of people may be sunk by superstition, ignorance, bad legislation, famine and fever. The interests of political economy, religion and medicine, are equally involved in the contemplation of such revolting facts.

Quebec, August 28th.

Before and since my trip to Gros Isle, I have visited the Marine Hospital of this city (under the care of several of its most respectable physicians), where a great number of seamen are down with the fever, and near which there are extensive sheds, filled with sick immigrants. I have also been at the House of Correction, and in the Hotel Dieu, where I saw cases; and at the private hospital of Dr. James Douglas and Dr. Racey, in Beauport, a village three miles from the city, where I saw still more. Many of the cases I examined with care, and held conversations, more or less protracted, with a number of the medical attendants, among whom I may mention Dr. Morin, Dr. Racey, Dr. J. Douglas, Dr. Clark, and Dr. Fremont, whom I may unite with the physicians of Gros Isle, as the authors of what I am about to say on the history and treatment of the fever.

1. The pauper immigrants from Ireland, are its chief victims; but it also affects the Irish pensioners, whose means must have kept them above the minimum of diet to which the former had been reduced by the famine; finally, it invades the officers and seamen of the ships which bring them over, and the physicians and nurses who wait upon them after their arrival. A great number die on the voyages, and many arrive ill; but it has been observed at Gros Isle, that a large number are attacked soon after being landed. Others remain well, and are sent on to Quebec, where a portion of them are taken down, while others escape till they reach Montreal, or the towns above. When at Oswego, in the State of New York, on my way out, I saw a number of cases.

It affects men rather more than women, and adults more than children; hence it has multiplied the number of infants on the banks of the St. Lawrence, to an unprecedented extent. I have already mentioned the mortality of the physicians at Gros Isle, a seventh of whom have died. In the Marine Hospital of Quebec, nine or ten of the old nurses have perished, and others are disabled, so that there is not one now on duty who was there before the fever was introduced. In the sheds, both there and here, but especially there, the crowd of patients is so great, that one, as I have said, can barely turn round among them, and in several of them, men, women and children, are indiscriminately huddled together. As the government has not undertaken to furnish them with clothing, most of them lie in the foul and tattered garments which they wore during the voyage, and perhaps long before. Now whether the disease is propagated by a gas developed chemically, from the organic matter which surrounds them, or by a morbid, aëriform secretion, from their bodies, we are at no loss to account for the sickness of physicians and nurses. On the question of its spread beyond the sheds and hospitals, I have sought

for information. The medical gentlemen with whom I have conversed, without a single exception, are of opinion, that it can be communicated by fomites, and cite instances of its appearing in families which had never communicated with any of the wards, but had employed those who had recovered from attacks. In the private hospital of Drs. Douglas and Racey, where there is cleanliness, free ventilation and ample space, very few of the attendants are attacked. On the whole, it appears to me that its mode of propagation should still be kept *sub judice.*

2. After seeing patients in every stage of the fever, and conversing with the gentlemen whom I have named, I may venture to give the following desultory account of its symptoms and progress.

Most of the cases are not seen in the beginning by physicians, and no reliable accounts can be gotten of them; but, on the whole, the majority seem to sicken gradually; and in reference to those who had been greatly reduced by famine, this is perhaps always the case. There are, however, many examples of sudden and violent invasion, followed by a malignant development, and death in a few days. In no instance does the chill become very intense, though it may be protracted; nor is the arterial re-action high. In some cases the latter, in fact, never manifests itself—the vital forces being inadequate to a rally. The pulse is never tense, and in the highest re-action always easily compressible; its frequency is increased, but not to a remarkable degree; it often becomes almost imperceptible, in those who ultimately recover. From the beginning the primæ viæ are more or less, but variously, disordered. In some there is nausea and vomiting; in all, loss of appetite, with thirst. Some are costive in the forming stage and even throughout the fever; in others, there is a *precursory* diarrhœa; in the majority a *supervening* diarrhœa, or actual dysentery. I could not ascertain that there is generally a superabundant excretion of bile. The tongue, at the onset, is always covered with white fur, through which the red papillæ sometimes show themselves; in part the edges and tip of the organ show some unnatural redness, but in the greater number the natural colour is not exalted, but even reduced, so that the white fur seems to shoot out of a pallid membrane. At the same time the organ becomes broader and flatter, loses its elasticity, and receives indentations from the teeth, on which I seldom saw any sordes. Its moisture continues in a remarkable degree; it may be reduced, but not to the point of dryness; and the whiteness of the fur endures to a period equally late. The dry, contracted, mahogany tongue, of genuine typhus, often appears, it is true; but in numerous instances the moist and pale state of the organ continues up to the time of dissolution. The usual inequality of heat, between the upper and lower parts of the body, is common. I saw many patients in which the latter were cold, and some in which the former were decidedly hot, but great development of caloric is not, I think, a constant phenomenon. Delirium is more prevalent than coma. Many patients, during the night, when it is greatest, are restless, and even locomotive—becoming, the next day,

composed and of sound mind. Somnolency did not appear to me to be a conspicuous symptom. Headache is often present. Of the dull and red eye I saw much less than I had expected. A circumscribed flush of the cheek is frequent, but not universal. A bilious tinge of the visage occasionally shows itself. Subsultus tendinum is comparatively rare. I saw many who seemed to be almost in *articulo mortis*, and yet showed little or none of that symptom.

The skin shows various kinds of maculæ. In a few, genuine rose-coloured spots show themselves, but very soon assume a darker colour. In the majority, the spots are purple from their first appearance, and of every size, from ordinary petechiæ up to diffused ecchymoses—often bearing a close resemblance to *post-mortem* hyperæmias. In some cases the spots are hard, like whelks, and the seat of a sensation which leads the patient to scratch them, whereupon ulcers follow, which occasionally assume a sloughing character. Hæmorrhages from the nose are somewhat common, from the bowels and skin not quite so frequent; nevertheless, all the medical gentlemen have had cases of well-marked purpura hæmorrhagica, mixed up with the fever cases; and it may be safely affirmed, that in these immigrants, the blood, under the influence of a reduced or unhealthy diet, has become signally deteriorated.

When the fever assumes a protracted form, anasarcous infiltrations into the cellular tissue of the lower extremities or the face, frequently take place. Suppurations, in addition to those of the skin just mentioned, are common. Those about the back and hips, may be ascribed to pressure; but others, occurring in glands, must be referred to the fever. Of these organs, the parotids suffer oftener than all the rest, and the discharge of pus, when they suppurate, is copious; such cases generally end well.

A supervening bronchial or pulmonary affection, is, on the other hand, ominous, and, as it frequently occurs, may be considered one of the modes in which the fever comes to a fatal termination.

But of all the secondary affections, that of the bowels is most frequent and fatal; though death may not occur for a considerable time after the febrile period has expired. This intestinal disorder seems to be a sort of mixed up diarrhœa and dysentery, under which the patient loses the original febrile symptoms, and, becoming extremely emaciated, gradually sinks. In some instances, this affection sets in during the fever—in others it is excited, in the period of convalescence, by irregularities of diet: in all, it is an ugly, obstinate, and unmanageable *addendum*. In the months of June and July, it was much less frequent than at the present time, when so large a proportion of the patients labour under it, as almost to constitute it a new act in the melancholy drama.

I have mentioned the nocturnal delirium of some patients, indicating an exacerbation at night; and may add to this evidence of periodicity, that in a few cases there has been a diurnal recurrence of the initial chilliness; the general character of the fever, however, is continued. I have spoken of cases which prove fatal in three or four days. They

are few in number; and the common duration is from two to three weeks, always excepting those which merge in diarrhœa or dysentery, when the end is quite indefinite.

When death is the consequence of cerebral pulmonary, hepatic or intestinal concentration, the reason of its occurrence is intelligible enough; but the majority do not seem to die from these lesions; and the cause of their dissolution is, *prima facie*, rather obscure. In every ward that I visited, I was surprised at the small amount of visible manifestation of dangerous disease; and, more than once, was prompted to say to the medical gentlemen, "I can't see why so many of your patients die." In wards from which many corpses were daily carried out, there would be but few who did not look at and after us; put out their moist tongues with facility, and make known their wants; yet many such patients die soon afterwards. Others die, when the physician has pronounced them convalescent—others after they have risen and dressed themselves, and crawled into the open air. Such deaths cannot be regarded as the effect of any particular organic lesion, but of a stage of exhaustion or collapse, bearing some resemblance to the third stage of yellow fever, or the recurring chill of a malignant intermittent in the South West; but more, perhaps, to the fatal stage of epidemic cholera.

After this imperfect, but, I believe, not unfaithful sketch of the history of this fever, I must proceed to its cure.

3. It is a maxim with the physicians of Gros Isle and Quebec, that a great amount of medication is inadmissible in this malady. Scarcely a patient is ever brought to them while the fever is still in its forming stage, so that there are but few opportunities of knowing whether art could arrest it in that stage. Once established in the system, the general opinion is that it cannot be cut short. The treatment, then, is merely palliative and corroborative.

By all the physicians, in almost every case, the lancet is repudiated, even when the patients are commanders of ships, and seamen, in whom famine had not preceded the attack. Local bleeding is almost as little employed, the majority of the physicians preferring counter-irritants, when the brain or the lungs are affected.

Emetics are prescribed by some, who speak well of their effects; but others think they predispose to congestions of the brain. It has not been observed by any that they break up the disease.

All employ cathartics; but the kinds, and the degree of their administration, present considerable variety; into which, however, I shall not enter, as drastic or long-continued purging is condemned by the whole.

Of sweating I can say nothing, for the patients, generally, are placed under such circumstances as preclude a resort to it.

A standard, or standing, febrifuge mixture, at Gros Isle, as given me by the apothecary, Mr. Barter, is the following:—R. Sod. et pot. tart., ℥ij.; liq. ammon. acet., ℥jss.; spt. ether, nitr., ℥ss.; aquæ commun., ℥xij. Misce. Another is composed of the camphorated mixture, tincture of hyoscyamus and tartar emetic.

Some of the medical gentlemen attach but little value to this class of medicines, and rely, during the more acute stages of the fever, chiefly on free dilution; but advise against the addition of acids, as likely to irritate the bowels into diarrhœa.

Opium is not in much favour in any stage of the fever. At a comparatively early period, some physicians commence the administration of wine and aliment, a practice condemned by others, as dangerous to the brain; but all concur in this, that sooner or later, and sometimes quite early, there comes a pathological condition which demands prompt and energetic stimulation. In this resort a choice of means is not to be neglected. Of the whole materia medica, camphor is the most reliable. It is given in doses of ten, twenty or even thirty grains, and often arrests the sudden sinking of the powers of life, and determines a speedy recovery. At the same time alcoholic stimulants, sulphate of quinia, food and sinapsims are employed.

For the diarrhœa and dysentery, the cretaceous mixture, hydrarg. cum creta, astringents, and diluted nitric acid, with laudanum, are the usual prescriptions.

MONTREAL, September 3d.

A large number are sick in the sheds at this place; attacked, of course, after they had left the quarantine ground. A great proportion of them are said to have disentery. The deaths are numerous. The fever, here, is by no means confined to immigrants, but has invaded the city, and added greatly to its ordinary summer mortality. Its victims, however, are largely of that class which, living near the wharves, received and mingled with the immigrants, before sheds were provided for their reception. In conversing with several of the most intelligent physicians here, I find the treatment to be substantially the same as at Gros Isle and Quebec; but latterly, as Dr. Badgely informed me, increasing reliance is placed on nitric acid. He uses the following formula:—℞. Acid nitr. ʒj.; alcohol, ʒiv.; aquæ ʒiv. Misce. An ounce is to be given every hour, beginning early in the disease, and without much preparation of the system. Under its administration, he and other gentlemen have, as he assured me, seen the pulse rapidly reduced in frequency, with a corresponding abatement of all the febrile symptoms.

When at Gros Isle I inquired as to *post-mortem* inspections, and could hear of only two. They were made by Dr. Watt, who found the liver engorged, and, as he believed, fatty. The state of the organs convinced him that the one mentioned suffered more than any other, which led him to prescribe purges of calomel and gamboge. In Quebec I could not learn that any dissections had been made. In this city Dr. Fraser has published, in the July No. of Dr. Hall's valuable "British American Journal of Medical and Physical Sciences," a short paper, in which he says:—

"The morbid appearances found on dissection, are venous congestion, with effusion of serum on the surface, in the ventricles, and base of the brain, but no trace of active inflammation. When the case has been complicated with bronchitis, I have found the bronchial

mucous membrane throughout, tumid, swollen, highly vascular, and containing much mucus; the vascularity extending to the submucous tissue, with congestion and partial hepatization of portions of the lungs. When diarrhœa has existed, the small intestines, especially the lower portion of the ileum, has presented the appearance of active congestion of its mucous coat, which was slightly thickened, without being softened; some patches had the appearance of sanguineous extravasation, not unlike the maculæ observed on the skin. When the patient had a jaundiced appearance, a common occurrence in this epidemic, I have found the liver enlarged from congestion, presenting a bloody and bilious appearance when cut into, and the gall-bladder distended with inspissated bile, thick enough to maintain its form when deprived of its covering. When there has been only a slight bilious tinge of the skin and conjunctivæ, the liver presented the same appearance in a less degree, the bile in the gall-bladder being about the consistence of treacle."

Dr. Fraser does not tell us how many autopsies he had made; and we cannot but regret that so little has been done, where the opportunities are so great. It may be given in extenuation, however, that the physicians in attendance are overworked, and that many of them have been ill with the fever.

I have no time to give you the statistics of this disease, had I been able to collect full data. The number of deaths, in proportion to that of the cases, never will be known, as nearly every form of disease in the immigrants goes very much under one name. I may say, in general terms, that the mortality has been, and still continues, very great. Take the following as specimens. At Gros Isle, for the week preceding the 24th of August, the number of patients averaged more than 2,000, and the deaths amounted to 288. In the Marine and Emigrant Hospital of Quebec, the average for the week ending the 21st of August was about 850, the deaths 166; to which might be added 34 said to have died of dysentery, a sequel of the fever. The Montreal returns would be about the same; and present, in the aggregate, about 100 deaths a day at the three places. At Gros Isle alone, up to the 20th of August, the deaths had amounted to 2116. The disease had then prevailed about three months. A portion of them, however, have resulted from smallpox, which has prevailed to a considerable extent on the island, and more or less, I believe, in Quebec and Montreal, certainly in the latter, where I saw it in the General Hospital.

The British government have lately made an effort to arrest the fever by disinfecting agents. Dr. Stratton, of the Royal Navy, but sojourning in Upper Canada, has been commissioned to this enterprise, and arrived in Quebec while I was there. He was advised that two agents would be forwarded to him. One proved, on opening the package, to be Sir William Burnett's patent disinfecting fluid; the other, a small bale of dresses for a lady! which had been forwarded from Halifax (by mistake) instead of Ledoyen's disinfecting fluid. The former (of which Dr. Stratton kindly presented me with a small

vial, which I carry in my trunk as an amulet) is said by the medical gentlemen of this quarter, to be a solution of the chloride of zinc. The latter, according to Dr. Hall, is a liquor of nitrate of lead. When I left Quebec, arrangements were making for experiments in the Marine Hospital, but its physicians seemed to think lightly of the practical value of such measures. When I was at Gros Isle, Dr. Douglas, the Quarantine Physician, sagaciously remarked, that the proper place for such experiments is an emigrant ship on her voyage.

In conclusion, I must beg of you to correct at least the grosser blunders of style, which are unavoidable in the circumstances under which I have written this most hurried epistle. With all its imperfections, it may, however, be of some interest to such of your readers as may not have seen much of what may have have been written by others on the Irish epidemic; and in that conviction I dismiss it, by subscribing myself, very respectfully, Your ob't servant,

DAN. DRAKE.

Massachusetts Medical Society.—A quarterly meeting of the Counsellors of this Society was held at the Masonic Temple on Wednesday last, the day the Journal is published, which precluded the possibility of inserting even a synopsis of the transactions in that No. There has not been so many Counsellors together at an ordinary business meeting within the compass of our recollection. The circumstance even quite astonished one gentleman, who expressed his surprise, and exclaimed—"Mr. President, what is the meaning of this unusual congregation? Is there some design in it?" Dr. Howe, of Billerica, contrary to an impression abroad, took the chair, having withdrawn his letter declining the honour of the presidency. A long and unnecessarily tedious debate occurred in regard to a short report from the delegates of the Society to the National Medical Convention. Closely upon that, another came upon the tapis, which would have been admirable in a legislative body, where the object was solely to occupy the time in order to keep off another subject.

Everything else having been satisfactorily disposed of, Dr. Childs, of Pittsfield, introduced the following resolution:—

"*Whereas*, The great object of medical association is the advancement of medical science, and the promotion of harmony and good feeling in the profession, thereby contributing to the best interests of society—and whereas the present organization of the Massachusetts Medical Society does not fully meet these important objects—therefore, *Resolved*, that a change in the organization of the Massachusetts Medical Society is in our opinion deemed both wise and expedient—and that the change consist in making the basis of the State Society, local or county associations; in other words, having the State Society constituted by delegates annually chosen by the county associations, agreeably to the principle adopted in the States of Connecticut, New York, Vermont, Ohio, and in most of the States in the Union."

Its introduction was like sending a fire-brand into a magazine of wet powder. There was no sudden explosion, but a general movement on the surface. By little and little, the ignition extended, and

such a warming up of the quiescent old furnace has not occurred in that sedate circle for many a day. The Counsellor from Berkshire expressed himself with an unusual degree of energy and eloquence. Even those who most staunchly opposed the measures advocated by him for a re-organization of the Society, so that the profession in the western counties may profit by the association, admitted that the speaker was a man of strength, who pleaded his cause with commanding force and dignity. We shall not detail the various propositions for throwing overboard the petition for a remodelling of this venerable institution, which has, for a period of sixty years, conducted so many physicians and surgeons in peace, security and respectability; nor advert to the cogent and ingenious arguments urged upon the Council in favour of the scheme. After a protracted, as well as excited session, an unmistaken evidence of impatience being manifested by those wishing to take the afternoon cars, as well as by another division accustomed to dining before tea-time, a large committee was raised, to whom the subject was referred, and a report may be expected at the next meeting in February, when, it may safely be predicted, the Council will again be well attended.

Drs. Jeffreys of Boston, Peirson of Salem, Walker of Boston, Bartlett of Concord, and Childs of Pittsfield, were the prominent speakers on this exciting question. While some regretted, in private conversation, the introduction of this apple of discord, others were delighted with the discovery that there was some excitability in what they had doubtless considered as dry bones.

When the Berkshire gentleman memorialized the General Court the past winter, and stated sundry grievances, such as the local wants of the members residing at a distance from Boston, and also the noticeable fact that about one hundred regularly-educated physicians, in western Massachusetts, could not become members of the Society in its present imperfect condition, the petition was very summarily put under the table, or, what was equivalent thereto, disregarded by the committee, which aroused the Æsculapian blood on the sun-setting side of the Berkshire hills, whose excited members now seem disposed, like General Taylor, never to surrender.—*Boston Med. and Surg. Journal.*

Case of Poisoning by Vinegar. By A. H. David, M. D., Montreal. —Poisoning by acetic acid is so uncommon an occurrence, I have to request a small portion of your valuable columns for the details of a case I met with a few days ago; in which the patient—a widow woman, with four children—took, as near as I could ascertain, a quart bowlful of common vinegar. It appears that she had been dull and low spirited for two or three days previous, in consequence of the neglect (as her friends suppose) of a person from whom she had received the most marked attention, and to whom she had been attached prior to her marriage with her late husband. When I saw her, about three hours after she had taken the vinegar, she was in bed,

covered with a cold perspiration, and trembling from head to foot, and apparently alarmed at everybody and everything about her. Her breathing was very laborious and hurried; her countenance perfectly wild, and the pupils dilated; the tongue was dry and cold; pulse ninety-six and full: the abdomen much distended, with extreme acute pain at the *scrobiculis cordis*, so much so, that the slightest pressure there caused her to shriek out. She did not know any one about her, not even her own children, nor had she any recollection of anything that had happened from the time of taking the vinegar, which was about 11 at night, not even of her having gone to bed, which she was the last in the house to do. About 1 o'clock the inmates were all awakened by her shrieking for cold water, of which she had drunk an enormous quantity before I was called to see her. There was not any pain, heat, or constriction of the throat or fauces, but there were slight efforts to vomit. Having procured some sulphate of zinc, I gave her two scruples in a cup of water, which soon produced full vomiting, with great straining. I had then to leave her, but ordered full and repeated doses of carb. magnesia, till I could see her again, which I did about six hours after, and found her much relieved, and only complaining of headache, which left her after the operation of a dose of castor oil. Two days after, she was taken ill with a slight attack of continued fever, but is doing well.

I should mention that the quantity she threw up from the effects of the zinc was very great, and smelt strongly of vinegar, which she still perseveres in saying she did not take, although she was seen with the bowl filled with it in her hands by some of the family, when they were retireing to rest, she maintaining that she used the whole of the vinegar in bathing her head. However, I think we have strong presumptive evidence against her having so used it, and are justified in concluding that she took the whole of it.

The only case of poisoning by acetic acid that I have been able to find, is the one related by Orfila in the Annales D'Hygiene, and quoted by both Beck and Christison. The experiments instituted by Orfila prove that common vinegar, in large quantities, was found destructive to dogs when vomiting was prevented.

Taylor, in his work on Medical Jurisprudence says, "Acetic, citric and tartaric acids are not commonly considered to have any poisonous action on the body. At least, as far as I know, there is no case reported of their having acted injuriously on the human subject; and he is the only modern writer on medical jurisprudence who takes any notice or makes mention of acetic acid.—*British American Journal of Medical and Physical Science.*

Nephritis from Calculus, Simulating Cancer of the Stomach.—A Captain of infantry entered the Hospital of Val-de-Grace, under M. Champouillon. For seven years, this officer, of a sanguine and robust constitution, had complained of pain in the epigastrium, increased during digestion, and attended with vomiting after a tolerably full meal. For these sufferings the patient consulted numerous physicians,

all of whom spoke of gastralgia, of chronic gastritis, and consequently prescribed for him repose, baths, and a vegetable and mik diet. This regimen always produced a notable amelioration of the symptoms, so as to give the patient the idea of recovery. However, a new and final relapse occurred at the end of March, and the captain determined to enter the hospital, which he did on the 7th of April. The vomitings were then very painful, and almost continual; the belly was distended; the feet and hands presented a moderate amount of serous infiltration. Leeches were applied to the epigastrium, and ice placed on, and which was also taken internally, with morphia. The vomiting was by these means suspended for a few days, and then returned. The tongue, previously dry and brown, began to be moist and white. The matters vomited, at first white and glairy, became on the 12th of April, of a blackish colour. On a microscopical examination, they were found to be composed of mucus, and of a granular matter, which M. Millon recognized as blood-discs, altered in form. On the 13th, a consultation was held. The physicians present attempted in vain to percuss the epigastric region. The abdomen, always distended, prevented a manual examination, and the slightest pressure also caused the most severe pain. This circumstance, coupled with the nature of the matters ejected, and the straw yellow tint of the countenance, gave rise to the opinion that, instead of chronic gastritis, there was cancer of the stomach; and this opinion was strengthened by the fact, that his mother had suffered from cancer of the womb. Ice and opium were given; but the vomiting persisted till death, which occurred on the 16th. A post mortem examination was made the next day. The mucous membrane of the stomach was found slightly injected towards the great cul de sac, but appeared elsewhere quite healthy. The intestines, liver, and spleen, presented no pathological lesions. The kidneys were very large, imbedded in a layer of compact cellular tissue, to which they were firmly adherent. The cortical substance, considerably atrophied, was of a decidedly black colour. Each kidney enclosed a calculus of lithate of ammonia, rugose and mamillated, and of the size of a pigeon's egg. Several smaller calculi were contained in the pelves of the kidneys.

Here, then, was a complete error in diagnosis. The symptoms were such as might, with the greatest probability, be referred to cancerous disease of the stomach, with ulceration. In forming the diagnosis, no aid could be drawn from a manual examination of the epigastric region, and from palpation; but the same thing may happen in cancer of the stomach. M. Champouillon, indeed, in making his examination, and pressing on the lateral and posterior region of the abdomen, had excited acute pain. This pain, coinciding with the œdema of the extremities, and the frequent vomiting, at once led him to suspect nephritis from calculus, or with albumen. Consequently, he examined the urine of the patient to detect albumen, or an excess of lithic acid; but the re-agents employed gave no indications of either; and moreover, the patient never having complained of pain in the lumbar region, or of any derangement in the functions of the

kidney, the idea of renal disease was given up.—*Dub. Med. Press, from the London Lancet.*

Pathology of Elephantiasis.—M. Cazenave has now under his care, at the Hospital St. Louis, a case of elephantiasis affecting the entire right leg. The thigh is so enormously distended, that its circumference surpasses that of the woman's body suffering with it; but with this increased size there is no deformity. The leg, on the contrary, is not only enlarged, but deformed, presenting hard, projecting masses, extending down to the instep, and the foot is also large and deformed. According to M. Cazenave, this elephantiasis of the Arabs, consists in a pure and simple hypertrophy of the affected parts—hypertrophy peculiar so far as it is connected necessarily with inflammation of the lymphatics. Ordinarily, and such has been the history of the present case, the disease commences suddenly, by a sharp and deep-seated pain along the course of the lymphatic vessels, which are soon transformed into hard, knotty cords; the limb then becomes the seat of an erysipelatous inflammation, which disappears, but this only for a time, being again reproduced and continuing for a greater or less time. This state of things may go on for several years. The cellular tissue is consecutively inflamed, and a more or less considerable tumefaction is set up, which augments at every fresh outbreak of the disease. Although tolerably soft at first, and, as it were, œdematous, the swelling at length gets hard, and resists the impression of the fingers. It is then the knobs or lumps make their appearance, and which produce the characteristic deformity of elephantiasis, knobs which will extend onwards to the feet or hands, (according as the legs or arms are affected,) and are sometimes separated by deep circular fissures, the whole accompanied by the normal colour of the skin, or by a duller whitensss than is seen in the healthy state. The soft tissues alone are affected, unless the disease is of very long standing, and the deep fissures have degenerated into wounds and ulcers, which may bring on consecutive disease of the bones. It is very peculiar that elephantiasis is observed much more frequently in the lower extremities than in the upper. However, there was a case some years since under M. Sanson, at La Pitié, of a very bulky elephantiasis affecting a woman's right arm.

It is a difficult matter to determine the treatment to be adopted. In M. Cazenave's patient, compression has been tried by means of a wide bandage, with agaric placed under it, at places much tumefied. Internal medicines, as mostly happens, have proved quite ineffectual. Since the compression has been employed, certain parts of the limb have notably diminished in volume, although a perfect cure cannot be hoped for, on account of the old standing of the malady, and the enormous degree at which the swelling has arrived.—*London Lancet.*

Influence of Quinine on the Volume of the Spleen in Ague.—M. Valleix, physician of the Hotel Dieu, has directed his attention to the action of the sulphate of quinine on the volume of the spleen in inter-

mittent fever. He has done so to test the accuracy of a statement made by M. Piorry, that the disappearanec of the paroxysm coincides with the diminution of the volume of the spleen; that this organ sensibly diminishes in thirty or forty seconds after the administration of a full dose of quinine, in solution, and acidulated; that the diminution goes on very rapidly if the quinine be continued in a sufficiently large dose. M. Gouraud having examined into this matter, however, states that he has not found the spleen thus diminished, but that, in consequence of an accumulation of gas in the stomach, from the ingestion of the quinine, the left hypochondrium is rendered sonorous, and the dulness over the spleen becomes masked. These opposite statements M. Valleix has kept in view in making some fresh observations. He narrates a case, and its course; quite a simple case of ague, occurring in a young and robust man, who had never suffered before. It was a recent case, and there were no evidences of organic disease in any organ: the spleen had undergone very considerable enlargement, being readily perceived through the abdominal wall, and therefore its size could be estimated with the greatest precision. The sulphate of quinine, although given in a very strong dose of thirty grains, and acidulated, so as to render the salt a bisulphate, did not act as represented by M. Piorry, on the volume of the spleen, neither at the end of forty seconds, nor of twenty minutes, nor even of twenty-four hours. The medicine also had no such power when given in still greater quantity, but divided, during the day, into several doses, and continued on succeeding days. But after the application of cupping-glasses and leeches over the splenic region, the volume of the spleen, on the contrary, diminished rapidly, although the dose of quinine was abated. Lastly, notwithstanding the persistence of the splenic engorgement, the fever was cut short, and there was no trace of a recurrent paroxysm.

Another equally uncomplicated case occurred to M. Valleix, and the same method being tried, was attended by the same results. It must, however, be mentioned, that three days after the first dose of quinine, a slight diminution of the spleen was noticeable; but this little decrease, which perhaps, too, was partly owing to a bottle of eau de Vichy which the patient took, was lost sight of when compared with the rapid diminution which followed two days afterwards, when cupping-glasses were applied over the spleen, and which continued to go on. In this case, also, as in the preceding, although the enlarged spleen remained, the fever was removed.

The third case differed from the two preceding, in that it was of older date; but there was no essential difference in the effects of the treatment. The spleen remained unaffected in size during the first day, when quinine alone was given; but quickly decreased after local bleeding, although the dose of quinine was lessened. The fever was removed before the engorgement of the spleen had subsided.

Thus these observations contradict the assertions of M. Piorry, both as to the coincidence of the disappearance of the fever and the decrease

of the spleen, and as to the immediate and prolonged influence of quinine in diminishing the splenic congestion. M. Valleix also confirms the observation of M. Gouraud as to the formation of gas in the stomach upon the quinine being swallowed, augmenting the resonance over the left hypochondrium, and so hiding the dulness over the solid spleen beneath to a slight extent; not so much so, however, but that palpation and percussion will readily detect the engorged organ.—*Ibid.*

Suicides in France.—The report of the criminal justices of France, for the year 1845, contains the following details respecting the frequency of suicide, the means employed, and the motives. Of the number of deaths of the cause of which there has been suspicion, 11,049, there have been 3084 by suicide. The number of suicides in 1845 exceeds by 111 that of 1844, and by only sixty-four that of 1843. Of the 3084 suicides, 2332 were males, 725 females. Sixteen of the males and four of the females had not attained their sixteenth year; and among the number we find children of seven, eight, and ten years of age; 123 were between sixteen and twenty-one, 462 between twenty-one and thirty, 1201 between thirty and fifty, 945 between fifty and seventy, 203 between seventy and eighty, and forty-one above eighty. If we look to the relative number of suicides in the different months, we find 922 during the three summer months, June, July, and August; 861 during the three months of spring, March, April, and May; 756 in the three autumnal months, September, October, and November; lastly, only 545 in the three winter months, December, January, and February. The most common modes of suicide are hanging and drowning. 1110 suicides had recourse to the first of these ways, in 1845; 995 to drowning; 432 despatched themselves by firearms; whilst 213 asphyxiated themselves by the vapour of charcoal; this last named plan is most common in the Department of the Seine. The motives of suicide resemble those of other years: crosses in love, jealousy, the consequence of debauchery, misery, reverses of fortune, domestic troubles, the desire to rid themselves from physical sufferings, are the most common—*Ibid.*

Sanitary Measures in Egypt.—The Egyptian government, to give the fullest effect to quarantine regulations, has ordered the number of European and Arab physicians to be doubled throughout the country. Until the present time, there was one Arab and one European physician to fifty villages. Now there are to be four for the same locality, and this number may be increased when they are procurable. At the school of medicine at Cairo, the number of pupils has been doubled, as also the class of inferior medical officers. Such a demand for medical men in Egypt surely offers an opportunity to some of our over-numerous body to exercise the healing art in that country, and in a more profitable manner than they can hope to do at home, under the tender mercies of Boards of Health and Guardians, who

consider five shillings per diem ample pay for any amount of toil, and any risk of life.—*Ibid.*

Election by Concours.—It is stated, that the three Faculties of Medicine, of Paris, Montpellier, and Strasbourg, have given their voices, in answer to the request of their opinion, made by the Minister of Public Instruction, in favour of the maintenance of the election to vacant professorships by concours. The French Reform Bill just passed the Chamber of Peers, annulled the mode of election by concours for professorships, which had existed for some years, and it is on this ground that most of the opposition to the Bill is raised by the French profession.—*Ibid.*

On the Internal use of the Nitrate of Silver. By Mr. Richard Southee, *Cambridge.*—The nitrate of silver being much more frequently prescribed than heretofore, it may not be uninteresting to some of your numerous readers to learn that the discolorization of the skin is not of that frequent occurrence generally supposed; in fact, large and repeated doses may be given without producing such effect. In the year 1831, when the cholera raged to a frightful extent at the port of St. Petersburg, I ordered it in grain doses in every case of collapse, and frequently repeated the same quantity every quarter of an hour, without in one instance discolouring the skin. This remedy was mentioned as being very successful, in the report of the Government Commissioners, Drs. Russell and Barry, at the time; and I know of no medicine capable of producing reaction with so much certainty, though this sometimes was sudden and violent, requiring the immediate use of the lancet; and in several cases the inordinate excitement was difficult to suppress, but no discolorization followed. —*London Medical Times.*

Congenital Imperforation of the Urethra the whole depth of the Glands. By E. Whitehead, *Surgeon, Dakinfield.*—Mrs. B. gave birth to a male child on Christmas eve, 1846. I called the following day, but no remark was made. Being a distance of a mile and a half, I omitted visiting on the second day, but intended doing so on the third. However, early on the morning of my intended call I was hastily summoned. On my arrival, I found the infant screaming vehemently, and apparently in great pain. Upon inquiry, I was informed its bowels had been moved repeatedly; but the nurse could not say it had ever passed any urine. Upon examination this was verified, the glans penis being imperforate; bladder considerably distended. Not having my pocket-case with me, I ordered the little sufferer to be brought to my house, where, assisted by my friend Mr. Hunt, surgeon, of Ashton-under-Line, an opening was made with a lancet in the place where the orifice of the urethra is usually situated, and an attempt made to pass a probe; the lancet and probe were again used, but without success.

The incision was then carried through the inferior length of the glans, upon which urine escaped freely. Not the slightest vestige of

an opening could be found in the glans other than the one made by the operation, which was allowed to heal. The artificial outlet now supplies the place of the natural one.—*Ibid.*

Case of Strangulated Inguinal Hernia, reduced on the New Method recommended by Dr. Andrew Buchann, Professor of Institutes of Medicine in the University of Glasgow. By Archibald Wallis Mackie, *Cupar, Fife.*—G. M., aged seventeen years, railway labourer, of a stout habit of body, and enjoying previous good health, whilst employed lifting some heavy railway sleepers on Friday last, felt something to give way at the lower part of his abdomen. The patient was unable to walk, and was carried to a neighbouring house, where he remained till next day, when he was conveyed to his father's residence, a distance of eleven miles. I was called to visit him on Sunday morning, and on examination found a tumour the size of a hen's egg, situated in the right iliac region, the general characters of which led me to conclude that it was a case of strangulated oblique inguinal hernia. The patient had not had his bowels opened since the morning of the accident. I ordered him an enema, and, after waiting till it was expelled, I applied the taxis, but unsuccessfully; I then had recourse to the usual remedies adopted in such cases, but without any effect. I bethought me of the plan recommended by the talented Professor of Physiology in the Glasgow University, and I was glad to see my efforts crowned with success. The mode is very simple. I placed my patient on his back, flexing the thighs on the pelvis, and putting the muscles of the abdomen in as relaxed a condition as possible. I then desired the patient to empty his lungs of as much air as possible, and having an assistant at hand, who immediately held his nose and mouth to prevent inspiration, I applied gentle pressure over the tumour in the proper direction, and had the satisfaction to feel it give way, and, as it were, *draw up* into its natural cavity.

The *rationale* seems to me to be, when the lungs are emptied of air, the diaphragm is, as it were, sucked up to fill the diminished thoracic cavity; it (diaphragm) exerts a tractile power over the floating viscera of the abdomen, and draws the protruded intestine upwards—naturally *assisting*, if not altogether accomplishing the reduction of the hernia.

Such is the mode, I conceive, in which the reduction is accomplished; and I have no doubt that, in addition to the mechanical influence, the temporary suspension of the breathing must have a powerful sedative effect, and consequently a relaxing influence, on any part morbidly constricted. Before operating I would always give this plan a fair and impartial trial, and I am confident, if practitioners would adopt this method, they would have the satisfaction of relieving their patients, and thus averting the dangers of a painful and often fatal operation.—*Ibid.*

Typhoid Fever and Smallpox. By M. Serres.—On a former occasion we mentioned the treatment which M. Serres considers most

efficient in typhoid fever, viz., the black sulphuret of mercury; and, also, how the profession was led to adopt this method, from the good effects of mercurial preparations on the eruption of smallpox. In another communication to the Academy of Sciences the learned professor continues the same subject.

The intercurrent affections, says M. Serres, two diseases progressing at the same time in the same individual, each preserves its physiognomy, its special characters, although the intimate nature of both may have undergone a considerable modification. The most severe of the two almost invariably communicates its gravity to the other, and diminishes if it does not destroy the chances of recovery. In the treatment, therefore, of intervening disorders, the most dangerous must exclusively occupy the attention of the therapeutist; in order to judge a curative method, it should be put to the test of these intercurrent affections, and to this test I have submitted the method I propose for the cure of typhoid fever; and have chosen the most severe complication—variola. The dangers of confluent smallpox are known to all; vaccination has considerably diminished them, but within certain limits. Thus, at the Hospital of La Pitié, during the epidemic of 1825, out of 162 vaccinated subjects attacked by the epidemic, twenty-five died. From the statistics published by Dr. Bousquet, it appears that in the thirty epidemics of smallpox observed in France between the years 1816 and 1841, 5963 vaccinated persons were attacked, and sixty-two died. Analogous results have been noticed in England, Germany, Italy, and Sweden. This revival of smallpox was attributed to the inefficiency of vaccination—a conclusion which we consider erroneous: "It is," continues M. Serres, "to the influence of intercurrent disorders that this impotency of vaccination to prevent variola should be attributed, and chiefly to typhoid fever. During the epidemic of 1825 we were struck principally by two facts: the first was the progress of the pustular eruption, which was the same in the vaccinated subjects as in those who had not been vaccinated; and the second was the presence in the intestines of the facial characters of typhoid fever. The epidemic, in one word, was double; it was at the same time variolic and typhoid. The mortal influence of typhoid fever in cases of smallpox has appeared to us still more evident in cases of non-vaccinated patients. We may ask ourselves if, before the discovery of vaccine, the interference of typhoid fever was not one of the great elements of the danger of variola; and we will find in the symptomatic history of ancient epidemics abundant proofs that such was the fact. Typhoid fever is not, therefore, a new disease, but smallpox and typhoid fever were, perhaps, coeval: the cutaneous eruption of the former struck more forcibly the observer, and concealed the complication. It would seem that, after Jenner's discovery, variola was in a great measure arrested, and typhoid fever, being unmasked, was at last recognised." After having established that in most cases the complication of typhoid fever was the principal source of danger in cases of smallpox, the learned professor proceeded to say that he had watched attentively the effects of the black sulphuret of mercury in such cases, and that, in proportion

as the medicine relieved the symptoms of the typhoid fever, it also weakened the violence of the smallpox.—*Ibid.*

Antidotes of Arsenic.—Insoluble salts of arsenic, after remaining a certain time in the stomach, are at last absorbed, and act as violent poisons. The cause of this fact is to be found, according to M. Caventou, in the presence in the stomach of a certain quantity of muriate of ammonia, by the action of which the arsenical preparation becomes soluble. In order to ascertain the different degrees of facility with which the muriate of ammonia dissolves the arsenites of lime, of magnesia, and of iron, M. Caventou instituted experiments, the result of which was to prove that the arsenites of lime was readily dissolved in 115 parts of a saturated solution of muriate of ammonia, the arsenite of magnesia in 330 parts, and the arsenite of iron in 600. Consequently the hydrate of sesquioxide of iron is the antidote which will resist for the longest time the dissolving action of the gastric fluids, and which it will be most proper to exhibit in the first place in cases of poisoning by arsenic.—*Ibid.*

Hair, Wool, Rags, and Thread expelled in a Mass from the Rectum.—Mr. Edward Spry, of the Royal Cornwall Infirmary, recently read, at the annual meeting of the South Western Branch of the Provincial Association, an account of the cure of a young woman, aged sixteen, who voided with excessive pain two large lumps of foreign matters—the first about the size of an ordinary pullet's egg, the second larger and longer—much compressed and very hard, having a thin albuminous coating which served to conceal the character of the contents of the lumps until forcibly separated After being washed they were found to consist of dyed wool of various colours; of thread, of worsted, and of cotton and linen rags, all compactly fitted together, and weighing one ounce and four drachms. The patient had never from infancy enjoyed a good state of health, complaining of severe pain in her bowels. In September, 1846, when first attended by Mr. Spry, there was a considerable swelling just below the margin of the right ribs, and occupying the whole of the right hypochondrium. This tumour had a well-defined edge extending towards the epigastrium, and firm pressure on it occasioned pain. There were occasional vomitings. After the evacuation of the foreign substances, she steadily improved in health, and appears a fresh-coloured girl. It appears that this patient has no recollection of swallowing any part of the matters evacuated, but her mother stated that when a child learning to walk she would get at the seat of a settle in the kitchen, by the edge of which she held, and that the children often amused themselves by turning over the contents of a box in which old rags of all sorts were deposited; and that then the child must have swallowed the substances which after the lapse of many years were voided by the rectum.—*Ibid.*

Anencephalous Births.—Dr. Simpson states that, in his opinion, in anencephalous monsters the malformation arises from intra-uterine

disease, viz., from the bursting of the head when hydrocephalic. The brain is opened up and distended by fluid so that it becomes gradually absorbed; at length the enclosing membrane gives way. The two small tubercles, always seen in anencephalous cases lying on the base of the cranium, seem to be nothing else than the remains of the membranes, shrunken up and almost obliterated.—*Ibid.*

On the Recent Differences of Opinion as to the Cause of Scurvy. By ANDREW ANDERSON, M. D., one of the Surgeons to the Eye Infirmary, Glasgow.—I have no intention of describing this disease. There has come under my notice but one fact in its history which I believe to be new: the occurrence of well-marked scorbutic amaurosis, and its cure by lemon juice. On this, however, I shall not at present linger, my object not being to fill up the history of scurvy, but to offer a very few remarks upon its cause.

Dr. Christison, in his interesting paper in the Edinburgh Monthly Journal (June, July, 1847,) proves that scurvy can, in certain cases, be cured by adding milk to the food, and concludes that fluid to be anti-scorbutic in virtue of the casein which it contains.

This opinion at once struck me as being at variance with that usually held; and, thinking that I could reconcile the two, I drew out the substance of the following remarks.

Since then, it has appeared that Drs. Lonsdale and Curran (Edinburgh Monthly Journal of Medical Science, and Dublin Quarterly Journal, for August, 1847) have, as I did, thought Dr. Christison partly in the wrong, and advanced proof that milk is not essentially, or at least not in all cases, anti-scorbutic. But as neither of these gentlemen has given that explanation of the matter which occurred to me, I venture to submit it still.

Dr. Christison's *observation* is, that in the Perth prison, scurvy broke out from treacle having been substituted for milk in the prisoners' diet, and that it disappeared when milk was given. He found that there was no deficiency in the mere quantity of solid food provided to them, and none in that of its nitrogenous elements; but that (excluding gluten, which has been proved to be, when taken alone at least, not nutritious) there was in the food a marked deficiency of *nutritive azotised matters*,—viz. fibrin, albumen, and casein.

His *deduction* is, that it was the want of these which caused the scurvy; and that it was by supplying such matter, in the shape of casein, that milk proved anti-scorbutic.

Now in the first place it must be obvious to all, that this doctrine will not account for every outbreak of scurvy, or explain every cure; for it is notorious that lemon juice, without a drop of milk, or any nitrogen, has prevented and cured the disease in instances quite innumerable. But the question is, may not scurvy be the offspring of different causes, and owe its origin now to the absence of fresh vegetables, and again to that of nutritious azotised food?

It seems to me that this must be answered in the negative; and that it is not very difficult to reconcile the opposite opinions, and to

show how lemon juice and milk may both, and both in one way, be anti-scorbutic.

Briefly to recall facts, we know—

1. That it has been proved by authors, that while any debilitating and depressing agency may predispose to scurvy, its essential cause is improper food.

2. That food, to support human life, must contain fibrin, albumen, or casein—it signifies not whether they be of animal or of vegetable origin: and that to provide sufficient fuel for maintaining animal heat, non-azotised substances must in general be added, no matter whether they be amylaceous, saccharine, or oily.

3. That if nitrogenous food be absent, the body cannot be nourished, give as much of the other as you choose; and that if the latter be withheld, and the former taken in quantity sufficient to supply carbon to the oxygen absorbed, the system is apt to get loaded with superfluous nitrogenous matter, and gout, or worse, may follow.

But how is it that, both being given, the blood, if they alone be given, still becomes depraved, and scurvy is the consequence? It were easy to see a reason for this, if in all instances in which scurvy occurs, the quantity of nourishing food were, as in the Perth prison, too small; but there is abundant evidence to disprove this. Thus Dr. Curran (loc. cit.) records a very bad case, in the person of a woman who had been fed on plenty of butcher meat, and bread and butter, tea and coffee, wine and porter. Dr. Ritchie saw one parallel to this; and during the discussion on Dr. Christison's paper in the Edinburgh Medico-Chirurgical Society (Edinburgh Journal of Medical Science, June,) it was stated that the disease had occurred in a boy overfed with animal food, and in a lady whose diet was butcher's meat and milk. In these instances the food abounded in both varieties of the elements needful for nutrition, and yet it did not nourish well. How was this?

To find what was yet required, let us revert to the history of the prevention and cure of scurvy by lemon juice. This substance contains but 2 per cent. of solid matter, of which 1.77 is citric acid.—(Christison's Dispensatory, *in loc.*) Four ounces daily will shortly cure a bad case of scurvy, and yet can contain no more than forty grains of solids—solids, too, which are not nitrogenous. This cannot possibly furnish pabulum to make the blood nutritious; and yet it removes the malady. The lady whose case I have just cited was rapidly cured by oranges, her diet being otherwise unchanged; in explanation of which I venture to suggest the following hypothesis:—

Food appropriate to man must consist of three parts—the nitrogenous, to nourish; the non-nitrogenous, to produce the extra heat required; and a third element, to aid in the assimilation of these. This element is furnished by the various, usually more or less acid, juices contained in vegetables and fruits. In favourable circumstances man may dispense with these, and live in tolerable health, but withal obnoxious to disease; and if he be weakened, as by confinement, or depression, or previous disease; or if the nourishment

in the food be moreover scanty, as it was in the case of the prisoners at Perth, scurvy comes on.

All the substances eminent as anti-scorbutics contain more or less acid; and it is proved that the more acid the fruit, as Dr. Trotter found of gauvas, the greater is its virtue.

I presume then that these juices and acids act, not by themselves supplying nourishment for the blood, but by in some way promoting the assimilation of the nutritive part of the food: and I would compare their efficacy in scurvy to that of iron in anæmia. The anæmic patient may be fed exceedingly, but he cannot assimilate the nutriment he digests without the aid of a metal which itself can be no pabulum to the blood. And so the scorbutic may eat enormously of flesh, which is blood, (Liebig,) yet cannot change it into *his own* blood without the aid of certain vegetable matter; an aid which seems essential, though how it is given no man can tell. Vinegar and nitre, and one or two substances besides, have been found to cure scurvy now and then, (by Henderson, &c.,) but they have failed at other times. They probably exert in the process of assimilation an agency more or less like that of citric acid, although not so uniform or powerful; and so I suppose that milk may, by means of the *lactic acid* produced while it is digested, and not by means of its casein, effect in some instances the cure of scurvy. If it did so in virtue of the casein it contained, cheese should have the same effect,—a thing I never heard of. And milk, like vinegar and nitre, seems to fail more often than it prospers; for Drs. Curran, Lonsdale, and Ritchie record cases of the disease as having happened in persons making free use of milk.

When the diet is nitrogenous enough, lemon juice will be more useful; but when, as in the Perth prison, it is not so, milk may be the best anti-scorbutic, because it will supply the essential food of the blood, as well as what I may call its condiment. That is, milk alone may in such a case be preferable to lemon juice alone; but, no doubt, "both are best."

Why is there sugar in milk? Not to form flesh of course. Not to produce caloric either; butter would serve that purpose well enough. The casein to nourish,—the oil to heat; is it not possible that the lactine may be intended to promote the assimilation of these by being first changed into lactic acid, (as all nurses know it is,) and by then supplying to the infant the want of that vegetable food which he does not receive, and could not digest; for the purpose, in short, of preventing scurvy? Dr. Andrew Buchanan well suggests that the *experimentum crusis* were to try whether *whey* would cure a man of scurvy.

And how do potatoes nourish men so well (*teste* Hibernia) that no other article of food will singly keep them in such health? Mr. Crum has shown (Philosophical Society of Glasgow) that four pounds of potatoes contain about as much albuminous matter as an egg:—the root then affords starch to heat, and nitrogen to nourish; but peas and beans, which do as much, will not serve as man's sole food. They are deficient in the third, the anti-scorbutic element, which Baly has

shown to be possessed by the potatoe; hence its surpassing value,—it is *milk for men.*

May we not in some such way as this reconcile Dr. Christison's observations with common notions? The analyses which I am about to quote prove that there is no necessary lack of fibrin in scorbutic blood; nay, that even in severe cases that element may be unnaturally plentiful, and the corpuscles, moreover, not much diminished. The darkness of the colour of the clot, and its occasional jelly-like consistency, indicate no doubt a depraved condition of the blood: but the startling rapidity of the cure by lemon-juice appears to show that the error is in its vital structure, rather than in its chemical composition; and is repaired by putting into their right places, as it were, nutritive molecules already present in the fluid, rather than by the more tedious process of absorbing and adopting new materials.

When scurvy, however, does break out, it soon brings on anæmia; and then, of course, the corpuscles and the albumen are both progressively reduced in quantity, while the fibrin and salts remain unchanged. This will be seen in the last analysis which I shall quote which yet must not lead us to confound the essential with the acci' dental.

But Dr. Curran, too, has a chemical theory of scurvy:—

"Dr. Christison, by overlooking *the salts* contained in food, has committed an error which totally destroys all the value of his reasonings. That vulgar experience, which leads the bird-fancier to supply his birds with lime, should not be lost upon those who have to direct the nutrition of the masses of the human species. Dr. Aldridge is, however, the only chemist who has made his knowledge practically available on this subject; and from his excellent little work, I extract the following short, intelligible, general directions." (*Loc. cit.*. pp. 113–14.)

Dr. Aldridge's theory, it would appear, is, that it is the want of lime and saline matter in the food which causes scurvy. This were remarkable, if true,—because if so, how should pure citric acid cure the malady; and why, in the celebrated historical case of the continental army, did dry herbs, containing of course all their salts, fail to alleviate the scurvy like the fresh plants. But we need not discuss this point; for Dr. Aldridge's theory is not more correct than new. It is simply a *rechauffée* of that which, broached by Dr. Stevens fifteen years ago, was refuted by Dr. Kerr in the Cyclopædia of Practical Medicine (iii. 694.) But as it was possible that Dr. Aldridge might have analysed scorbutic blood before constructing his little work, I searched for his experiments, but in vain. Yet the materials may be found from which to form our judgment: in a paper by M. Fauvel, in the *Archives Générales* (Août 1847,) there are recorded some analyses of such blood by the experienced hands of MM. Becquerel and Rodier: and these I copy, as well as a portion of two imperfect ones from Dr. Ritchie's paper.

B. and R.'s Analysis of (See Simon's Animal Chemistry, i. 233, 234.) FEMALE BLOOD, HEALTHY.	Average.	Average of two of Dr. Ritchie's cases.	Average of two cases of little severity.	Average of two cases of much severity.	A very severe case indeed.
Corpuscles,	127.		116.	110.	79.
Fibrin,	2·2		2.8	3·8	2.2
Animal matter in serum,	72.		65.	67.	56.
Saline matter in serum,	*6·8	*6·	6·4	6·5	7·8· (Anæmia coming on.)

*I have deducted 0.54 in this analysis for the iron, as not forming part of the saline matter of the serum.

Hence we perceive that in point of *fact* the worst scorbutic blood may contain rather *more* saline matter than the healthy fluid does. May I venture to add, that

Dr. Curran, by overlooking the salts contained in the *blood*, has committed an error which totally destroys all the value of his reasonings. That vulgar prudence which leads the reasoner to base his theories on facts, should not be lost upon those who wish to direct the opinions of the members of the medical profession. MM. Bacquerel and Rodier are, however, the only chemists who have acquired any available experimental knowledge on this subject; and from their excellent little production I have extracted the preceding short, very intelligible, and particular analysis.

That scurvy is a "blood disease" no man can doubt; and I suspect that British blood has, by the past year of dry feeding, been depraved more generally than may be thought. All the blood drawn by my directions, during the last three months, from patients of the Glasgow Eye Infirmary (who presented no external signs of scurvy,) has been of most unhealthy aspect: the clot large, soft and dark, like black currant jelly; and the buffy coat, when present, gelatinous and pale.

It also appears to me indubitable, that scorbutic blood may be found in many differently perverted states. My friend Dr. Ritchie (Edinburgh Monthly Journal, August, p. 83,) has met with some containing just half the usual quantity of fibrin; in other cases we have seen that substance, on the contrary, augmented. The scorbutic state may be complicated with various other conditions of the system, which will of course tend to produce changes on the vital fluid, just as pyrexial blood varies according to the local lesion present. The effect of treatment furnishes a proof of this; for while bleeding is usually most hurtful in scurvy, and mercury quite a poison, cases do occur in which each of these means is indeed remedial. (Dr. Bogie in Lonsdale, *loc. cit.* p. 102.)

It is reasonable also to conclude, that when anæmia has come on, the treatment peculiarly suited to that state may with advantage be combined with that for scurvy; so that while the simple examples of

the disease may, as I have seen in patients of my own, be cured by pure citric or tartaric acid, the anæmic forms, in which the lips and the exuding blood are pale, will, as in a lady about whom I was consulted, be, by the use of iron, hurried on more rapidly to health.—*Monthly Journal of Medical Science.*

Case of Utero-Vesical Fistula—Novel Means of Relief.—Mr. Isaac Harrinson brought before the Reading Pathological Society the case of a woman, aged 41 years, who, thirteen days after a protracted labour, (which had to be completed by instrumental aid,) begun to suffer from a flow of urine from the vagina, not a drop passing through its natural outlet. This state had continued, to the patient's great torment, for five years previous to her coming under Mr. Harrinson's care. After repeated examinations with the speculum, the only exact information the author could obtain was, that the urine issued from the os uteri; how it came there he was unable to determine, and had almost given it up in despair, when, exploring with a small catheter in the bladder, with the concavity downwards and a finger in the os uteri, the catheter and the finger came in contact. The problem was now solved; there was a communication between the fundus of the bladder and the cervix uteri, about three-quarters of an inch within the cervix, just at its internal orifice, and as large as to admit readily a No. 6 male catheter. After making one of these examinations, a circumstance occurred which confirmed the author in a plan he had devised for the relief of the disease. For the first time for five years she remained dry for two hours; no dribbling took place, and she then passed water in a stream. This arose, he imagines, from the tumefaction of the edges of the fistula producing temporary closure of its orifice. In July, 1841, he acted upon his plan, by proceeding to operate in the following manner:—A Brodie's catheter, armed with a long piece of twine, was introduced into the bladder, concavity downwards; and being guided by a finger within the os uteri, he readily found the rupture, passed the instrument through the vagina, seized the thread, and then withdrew the catheter, thus leaving one end of the thread hanging from the urethra, and the other from the vagina. To the urethral extremity he tied a skein of six threads of glover's silk, oiled them, and drawing at the vaginal extremity, dragged the silk through the fistula, and then tied the urethral and vaginal ends together. The result was most gratifying. From the time of their introduction to the withdrawal of the last thread, no dribbling took place, except when the patient was using some extraordinary bodily exertion; and under these circumstances it did sometimes occur. On the 4th day after the operation, irritation beginning to be produced, the first thread was withdrawn; on the 5th the second; on the 6th the third; on the 10th the fourth; and on the 17th the fifth, leaving only one remaining;—so that in seventeen days the operation may be said to have been completed. During this time considerable irritability of the bladder existed, with great impatience of its contents, so that they were obliged to be evacuated every hour. This symptom, however, gradually subsided

simply with fomentations, and without the aid of any medicines. At each recurring menstrual period the urine was, and now is, voided highly charged with the catamenial fluid. During the three subsequent months Mr. Harrinson changed the size of the thread three times, so that at last it was reduced to as small a one as could be procured compatible with any strength and durability. In October the narrator withdrew the last thread. Unfortunately he was disappointed: in twenty-five days the dribbling was as bad as ever. Mr. Harrinson was glad enough, therefore, to retreat to his former position, by introducing now four large threads. In twenty-eight days they were reduced to one, and the patient was herself again. Mr. Harrinson has purposely delayed the publication of the case, in order to test the sufficiency of the means employed. He is pleased to add (May, 1845,) that she remains in the same comfortable state. She changes the thread herself once in three or four weeks, goes about, performs her domestic duties, &c., with no inconvenience. Not a drop of urine has escaped for the last three years. The only precaution necessary is, that the thread be drawn down once a day, to cleanse it from the sabulous matter which is deposited upon it.—*Abridged from the Provincial Med. and Surg. Journal.*

Progress of Quackery—Hahnemann and Holloway.—The following affords additional insight into the *modus operandi* of the medical cheats called homœopaths, while a contrast is presented by the effects of a rival practice. We always knew, and proclaimed it, that these advocates of a non-medical treatment administer most active remedies when the necessity for them arises:—

Practices of Homœopathists.

"Sir,—The account of the substitution of active substances, in anything but infinitesimal doses, for homœopathic globules, &c., as given in the last number but one in the *Gazette*, will not surprise many of those who have been accustomed to investigate closely the practice. I have also adduced analogous instances in the last edition of my work, especially the case of the Duke di Cannizaro, formerly well known in London as Count St. Antonio, who at Milan, being treated homœopathically for some slight ailment, had to take three globules, at intervals of some hours. Having accidentally omitted the morning globule, he said to his valet, when the time for taking the second arrived, that when he ought to take the third dose he would be at the opera, and that being homœopathic globules, it would do no harm to take the three at once, which he accordingly did, and was dead within two hours;—the preparation being one of nux vomica.—Your obedient servant, Edwin Lee."

"*Case of Death by Holloway's Pills.*

"Mr. Grimwood of Walton, narrates the case of a man, aged 25, long labouring under scrofulous disease of the femur and tibia, by whom he was consulted, on the 25th of June last, for symptoms indicative of inflammation of the intestinal mucous membrane. It appears

that the poor man, while in his ordinary state of health, was advised, with the hope of being cured of his old-standing complaint, to try Holloway's pills, beginning with five night and morning, gradually increasing the dose to ten, and then recurring to five. These instructions he punctually obeyed, with the effect of producing hypercatharsis, which he endured for about a week, in the belief that unless such an effect were caused, he could not obtain any benefit. This continued, and symptoms of greater severity setting in, Mr. Grimwood's assistance was sought, about ten days or a fortnight after the man commenced taking the pills. He then presented evident symptoms of peritonitis and enteritis in an advanced stage, attended with great exhaustion, from the effects of which he soon sank. A post-mortem examination does not appear to have been made."—*Dublin Medical Press.*

Pathology of Synchisis.—The Comptes Rendus contain an abstract of an interesting paper read before the Academy of Sciences, at the séance of July 19th, by M. Bouisson, on that affection of the vitreous body known as synchisis.

It has long been desired to make out the real nature of this abnormal condition, and various hypotheses have been brought forward.

M. Bouisson had entertained the idea that the moveable and sparkling particles observed deep-seated in the eye, in persons affected with this malady, were not caused by loose floating particles of the hyaloid membrane, but constituted of free crystalline morsels in the thickness of the vitreous body, the membrane of which was destroyed.

Upon devoting himself to some researches on the composition of the vitreous humour, he recognised the existence of a fatty matter, in such a state of minute division that the transparency of the humour was not affected by it. After having filtered the vitreous humour of the eye of an ox, he evaporated it in a porcelain capsule, and treated the residue with sulphuric ether. The resulting matter was then collected in a watch-glass, perfectly clean, and evaporated. During the process of evaporation, the ether deposited a fatty matter in a crystalline form. The same experiment upon a larger quantity of vitreous humour, obtained from several oxen's eyes, gave the same result, but more clearly. M. Bouisson has also obtained this fatty matter, by treating the vitreous humour of the human eye in the same manner.

If these results be taken in connexion with the observations which demonstrate that crystals of cholesterine have been found in the posterior chamber of eyes which have for a long time been struck with blindness, one will naturally be led to believe, that in the normal condition a certain quantity of fatty matter is contained in the vitreous humour, which may be separated in a crystalline form by some peculiar pathological influence, and may acquire, in this form, that apparent mobility at the bottom of the eye which arrests our attention.

From these facts and considerations the nature of synchisis may

be determined, for we have grounds to believe that this singular malady is due to the accidental deposition of the fatty matter of the vitreous humour in a crystalline form.

Synchisis, or synchesis, is described as a dissolved state of the vitreous body, in which the hyaloid membrane is either atrophied or destroyed; hence it is that the vitreous humour appears diffluent in form, and wanting in its natural consistence. Although this condition may result from inflammatory action, still it is more frequently met with in the eyes of the aged, as a natural decay or degeneration, and often in company with cataract—another instance of the failure of vital energy. Now, if the above observations of M. Buisson be confirmed, synchisis will afford another instance of that very general abnormal condition—fatty degeneration of the tissues—which has lately been so much studied and illustrated.

Synchisis, as a disease of old age, will be brought to coincide with other lesions of the aged, also marked by the abnormal production of fat, from perverted nutrition—as, for instance, the degeneration and subsequent calcification of the arterial coats. And at the same time, synchisis, considered as a result of inflammation, will agree, as to it pathological characters, with the consequences of inflammatory action in other organs, and in that self same circumstance—viz., the unnatural development of fatty matter. In old age, we should ascribe the appearance of the crystals of fat in the vitreous humour, in an abnormal condition, to impaired nutrition, and consequent degeneration with atrophy; and, again, we should especially anticipate the occurrence of atrophy when the synchisis is accompanied by cataract, whereby the function of the vitreous body is destroyed.—*London Lancet.*

Variations in the Quantity of Fatty Matter in the Human Lungs.—Relation to Jurisprudence.—The following extract, taken from the Comptes Rendus of the 12th of July, from a paper read by M. Guillot before the Academy of Sciences, has some relation in subject to that given above, inasmuch as it shows the accumulation of fat in the lungs whenever their function is impaired.

M. Guillot first states the plan he has pursued in the examination and analysis of the lungs, on which his essay is based. He has first weighed the lungs in their moist state, the right and left, and whether healthy or diseased.

He has next separated the diseased from the healthy portions, and ascertained their respective weights. They have then been dried, in vacuo, at a temperature of 140°, and afterwards powdered, and then again dried. The powdered matter has next been treated with rectified ether, so as to remove all fatty matters. M. Guillot then informs us, that from his analysis he has found the amount of fatty matter contained in the pulmonary tissue to be more considerable in the fœtus before than after birth; that it diminishes from the moment the infant commences to breathe,

At the close of intra-uterine life, before the respiratory function is

set up by birth, the proportion of fatty matter to the dried tissue of the lungs is from ten, twelve, fifteen, or eighteen to one hundred. But as soon as the air has entered the lungs, this proportion decreases to six parts to the hundred.

In all the affections of the chest, the consequence of which is to arrest permanently or transiently the respiratory act, in a greater or less extent, according to the extent of the lesion, the proportion of fatty matter increases in those parts rendered impermeable to the air. Under such circumstances, the rise in the quantity of such matters may be from fifteen to twenty, or thirty or forty, or even fifty parts to one hundred; whereas, in healthy portions of the same lungs, the proportion very rarely exceeds that of ten parts to the hundred. This fact hold good from the period of birth until advanced old age, in all cases where the lungs are obstructed by disease, or labour under phthisis. These organs, therefore, appear to undergo a fatty degeneration, which seems to be in relation with the absence of the contact of the air with the diseased parts.

The examination of lungs which are yet penetrated by air, notwithstanding extensive lesions, further supports this notion; for in such particular circumstances, the quantity of fatty matters extracted by means of ether is never equal to that afforded by portions of lungs in which air has ceased to enter during life.

According to the tables which the author has furnished, the greatest increase in the proportion of fat in the lungs takes place in phthisis, in which he has collected forty and even fifty-two parts in one hundred of desiccated pulmonary tissue. Here we may consider the fat to be derived both from the destruction of function of the lung, and also from the tubercular matter itself, which has long been observed to be mingled with much fat, so that it even seems but as a modification of that general pathological condition known as fatty degeneration.

Comparing lungs affected with pneumonia;—in those which are quite impermeable to air, the proportion of fat rises to fourteen, sixteen, and twenty-four parts in one hundred; whereas in those which are yet permeable, its proportion is as six to one hundred, in two out of three cases; in the third, as eleven to one hundred.

M. Guillot observes, these variations in the quantity of fat in the lungs, according as the process of respiration is free or interfered with,—rising in the latter case,—are interesting to physiologists, and seem to indicate that a part of the fatty matter entering the blood becomes consumed in its passage through the lungs by the act of respiration. In cases of pneumonia and phthisis, where the lungs become impermeable to air, this fat begins to accumulate until its quantity equals, and even surpasses, that observed in the liver, in which the quantity of fat is so appreciable and considerable.

From experiments I am now making, (says M. Guillot,) I am led to believe that the section of the pneumogastric nerves, and asphyxia, produce in animals phenomena analogous to those above pointed out.

Before quitting this matter, we would call our reader's attention to one point in the preceding paper which seems to us to have an important bearing on a much disputed point of medical jurisprudence—viz., *the distinction between respiration and inflation*, or insufflation, in the lungs, in cases of suspected infanticide. To determine this distinction is a great desideratum. Now, supposing the analyses of M. Guillot to be correct, can we not make use of them for the above-mentioned purpose? He tells us, that as soon as the child has breathed, the quantity of fat in 100 parts of desiccated lungs diminishes but one-half at least, supposing the child to have arrived at the eighth or the ninth month of intra-uterine life. Thus, instead of the proportion of fatty matter being twelve, fifteen, or eighteen parts in 100, it is, by respiration, reduced to six parts. Now the question is, whether inflation will bring about this decrease of fatty matter as well as respiration. We should, *á priori*, think not; for this reduction of quantity is dependent on a vital action, and on certain chemical changes taking place in the blood under the influence of life. We can conceive how the pulmonary capillaries of the air-cells may become filled with blood by insufflation in a dead child, so as to resemble air-cells duly developed by respiration, but cannot understand how such a chemico-physiological change, as is the alteration of the proportion of fat in the lungs, can take place in such a manner, and after the extinction of life.

Be this as it may, the researches of M. Guillot are highly valuable in other respects, and are deserving of consideration and of repetition in this country; and if any relation or utility is perceived in them to forensic medicine, we shall have the merit of having directed the attention of the profession to them, and there will no doubt soon be inquirers in the same field to test the above researches in all their points of application.—*Ibid.*

Operating for Cataract under the Influence of Mercury.—M. Tavignot addressed a note to the Academy, stating that he looked upon mercurial salivation as a means of preventing many of the evils of inflammation after the operation for cataract. He seems to have imbibed this notion from the general observation of the influence of mercury in acute inflammation of the iris and cornea, and from considering that such a condition of those parts of the eye is what is to be feared after operating. He has put this idea to the test, having operated on three patients, who were just beginning to be affected by mercury, and in whom, too, there were some complications. He effected a perfect cure in from three to five weeks, having had no ills resulting from inflammation. The mercury is continued two or three days after operating, combined with extract of opium, so that the salivation induced may be most severe, just at the time when the ordinary precursors of iritis, or of corneitis, make their appearance—that s, about the third or sixth day after the operation.—*Ibid.*

THE

MEDICAL EXAMINER,

AND

RECORD OF MEDICAL SCIENCE

NEW SERIES.—No. XXXVI.—DECEMBER, 1847.

ORIGINAL COMMUNICATIONS.

*Objections to the Theories of Franklin, Dufay, or Ampere, with an effort to explain electrical phenomena by the statical or undulatory polarization of omnipresent, ethereal, or ethereo-ponderable matter.**

By ROBERT HARE, M. D., Emeritus Professor of Chemistry in the University of Pennsylvania.

1. It appears, from the experiments of Wheatstone, that the discharge of a Leyden jar, by means of a copper wire, takes place within a time so small, that were the transfer of a fluid from the positive to the negative surface requisite for its accomplishment, a current having a velocity exceeding two hundred thousand miles in a second would be necessary.

2. The only causes for the velocity of an electric current, according to Franklin, are the repulsion between the particles of the electric fluid, of which it has been assumed to consist, and

* Read before the Academy of Natural Sciences, and although ordered to be published in the forthcoming volume, has been excluded by matter having priority of date. Hence, to avoid procrastination—with permission from the Academy—it has been communicated to the obliging Editor of this work.

This commnnication might have been offered to the Journal in which those affiliated with the University usually make their communications, were it not that my friend, the editor, to an inquiry replied, that "*nothing which is not directly applied to medicine*" would be published in that channel.

the attraction between those particles and other matter. These forces are alleged to concur in distributing the supposed fluid throughout space; whether otherwise void, or partially pre-occupied by conducting solids or fluids. Hence, when between two or more spaces, surfaces, or conducting masses, there is an unequal distribution of the electric fluid, the equilibrium is restored whenever a communication is opened, by means of a sufficiently conducting medium. Agreeably to this view of the subject, there seems to be a resemblance between the supposed effort of the electrical fluid to attain a state of equable diffusion, and that which would exist in the case of a gas confined in adjoining receivers, so as to be more dense within one than within the other; for, however the subtility of the supposed electric fluid may exceed that of any gas, there seems to be an analogy as respects the processes of diffusion which must prevail. But on the escape of any elastic fluid from a cavity, within which it may be condensed, evidently there must be a diminution of density, and of the consequent velocity of efflux, proportionally as the quantity left in the cavity diminishes, so that the latter portions would move with extreme slowness. Far from taking place in an analogous manner, electrical discharges are effected with an extreme suddenness, the whole of the redundancy being discharged at once in a mode more like the flight of a bullet, projected with infinite velocity, than that of a jet varying in celerity from a maximum to a minimum.

3. So far, in fact, is an electrical discharge from displaying the features which belong to the reaction of a condensed elastic fluid, that agreeably to the observations of Henry, the result is more like the vibrations of a spring, which, in striving to regain its normal position, goes beyond it. The first discharge between the surfaces of a Leyden jar is not productive of a perfect equilibrium. The wave-like transfer of different polarities goes beyond the point of reciprocal neutralization, producing a state, to a small extent, the opposite of that at first existing; and hence a refluent discharge ensues, opposite in direction to the primary one. But even this does not produce an equilibrium, so that a third effort is made. These alternate discharges were detected by means of the magnetism imparted to needles exposed, in helices, to the consequent current, more properly called polarizing undulations or waves.

4. Supposing one or more rows of electrical particles, forming such a filament of electricity as must occupy the space within a wire of great length, to be made the medium of discharge to a Leyden jar; agreeably to the hypothesis of one fluid, the electrical filament must be attracted at one end of the wire, and propelled at the other, as soon as its terminations are brought into

due communication with the coatings of the jar. Yet the influence of the oppositely charged surfaces of the jar cannot be conceived to extend to those portions of the electricity which are remote from the points of contact, until they be reached by a succession of vibrations. Hence it is inconceivable that every particle in the filament of electric matter can be made at the same time to move, so as to constitute a current having the necessary velocity and volume to transfer, instantaneously, the electricity requisite to constitute a charge. Even the transmission of the impulses, in such an infinitesimal of time, seems to be inconceivable.

5. In reply to these objections, it has been urged by the Franklinians, that a conductor being replete with electricity, as soon as this fluid should be moved at one end, it ought to move at the other. This might be true of an incompressible fluid, but could not hold good were it elastic. A bell wire moves at both ends when pulled only at one; but this would not ensue were a cord of gum elastic substituted for the wire.

6. But if the flow of one fluid, with the enormous velocity inferred, be difficult to conceive, still more must it be incomprehensible that two fluids can rush with similar celerity, from each surface of the jar, in opposite directions, through the narrow channel afforded by a wire; especially as they are alleged to exercise an intense affinity; so that it is only by a series of decompositions and recompositions that they can pass each other. That agreeably to the theory of Dufay, equivalent portions of the resinous and vitreous fluids must exchange places during an electrical discharge, will appear evident from the following considerations:

7. One surface being redundant with vitreous and deficient commensurately of resinous electricity, and the other redundant with the resinous and deficient of the vitreous fluid, it is inevitable that to restore the equilibrium, there must be a simultaneous transfer of each redundancy to the surface wherein there is a deficiency of it to be supplied. If after decomposing a large portion of the neutral compound, previously existing on the surfaces of the jar, and transferring the ingredients severally in opposite directions, so as to cause each to exist in excess upon the surface assigned to it, were the redundancies, thus originated, to be neutralized by meeting in the discharging rod, neither surface could recover its quota of the electrical ingredient of which it must have been deprived agreeably to the premises.

8. This calls to mind the fact, that no evidence has been adduced of the existence of any tertium quid, arising from the union of the supposed electricities founded on any property displayed by their resulting combination in the neutral state. It must, if it exists, constitute an anomalous matter, destitute of all properties, and of the

existence of which we have no evidence, besides that founded on the appearance and disappearance of its alleged ingredients.

9. But however plausibly the discharges consequent to making a conducting communication from one electrified mass or surface to another mass or surface in an opposite state, may be ascribed to accumulations either of one or of two fluids; neither, according to one theory nor the other, is it possible to account satisfactorily for the stationary magnetism with which steel may be endowed, nor the transitory magnetism, or dynamic power of induction, acquired by wires transmitting galvanic discharges.

10. For the most plausible effort which has been made for the purpose of reconciling the phenomena of electro-magnetism with the theory of two fluids, or with that of one fluid, so far as these theorie are convertible, we are indebted to Ampere.

11. According to the hypothesis advanced by this eminent philosopher, the difference between a magnetised and an electrified body, is not attributable to any diversity in the imponderable matter to which their properties are respectively due, but to a difference in the actual state or distribution of that matter. Statical polarity is the consequence of the unequal distribution of the two electric fluids whose existence he assumes; while magnetical polarity is the consequence merely of the motion of those fluids; which, in magnets, are supposed to gyrate in opposite directions about each particle of the mass.

These gyrations are conceived to take place only in planes at right angles to the axis of the magnet; so that, in a straight magnet, the planes of the orbits must be parallel to each other.*

12. The aggregate effect of all the minute vortices of the electrical fluids, in any one plane, bounded by the lateral surfaces of the magnet, is equivalent externally to one vortex, since, in either case, every electric particle on that surface will so move as to describe tangents to a circle drawn about the axis of the magnet. When the electrical vortices of the pole of one magnet, conflict in their direction with those of another, as when similar magnetic poles are approximated, repulsion ensues; but if the vortices are coincident in direction, as when dissimilar poles are near, attraction takes place. When a current through a galvanized wire concurs in direction with the magnetic vortices, as above described, attraction ensues; repulsion resulting when it does not so concur. Hence, the magnet, if moveable, will strive to assume a position, in which its electrical currents will not conflict with those of the wire on one side more than on the other: also, the wire, if moveable, will tend so to arrange itself as to produce the same result, which can arrive only when the needle is

* The words gyration, vortex and whirl, are considered as synonymous, and alternately used only to avoid monotony.

at right angles to the wire, and its sides consequently equi-distant therefrom.

13. Electric currents will produce magnetic vortices, and reciprocally, magnetic vortices will produce electric currents. Hence the magnetism imparted to iron by galvanized spirals, and the Faradian currents produced by magnetized iron within spirals not galvanized.

14. Ampere's theory has, in a high degree, the usual fault of substituting one mystery for another; but, on the other hand, it has, in an equally high extent, the only merit to which any theory can make an indisputable claim: I mean, that of associating facts so as to make them more easy to comprehend and to remember, enabling us, by analogy, to forsee results, and thus affording a clue in our investigations. Evidently, the author of this theory was guided by it, in his highly interesting and instructive contrivances; and Professor Henry ascribes his success in improving the electro-magnet, to the theoretic clue which he had received from Ampere.

15. Nevertheless, the postulates on which this Amperian hypothesis is founded, appear to me unreasonable. They require us to concede that about every atom of a permanent magnet a process is going on, analogous to that generally admitted to exist in a galvanic circuit, where two fluids pass each other in a common channel by a series of decompositions and recompositions. In the galvanic circuit this process is sustained by chemical reaction, but in magnets having no co-enduring reagency to sustain it, the heterogenous constituents of an imaginary electrical tertium quid, are presumed to be perpetually separating in order to recombine.

16. In cases of complex affinity, where four particles, A B C D are united into two compounds A B, C D, it is easy to conceive that, in obedience to a stronger affinity, A shall combine with B, and C with D: but, without any extraneous agency, wherefore, in any one compound, should a particle A quit one particle B, in order to unite with another particle of the same kind; or wherefore should any one, B, quit one A, in order to combine with another A.

17. That such a process should ensue by a species of catalytic agency exercised by a magnet or galvanized conductor, while in proximity, were difficult to understand; but to me it is utterly unintelligible that the transient influence of such a cause, should be productive of permanent gyrations.

18. Moreover, it is inconceivable that the particles of any matter should, as required by this hypothesis, *merely by being put into motion*, acquire a power of reciprocal repulsion, or attraction, of which it were otherwise destitute. The vortices being assumed to take place about each atom, cannot severally occupy an area of

greater diameter than can exist between the centres of any two atoms. Of course, the gyratory force exercised about the surface of a magnet by the aggregate movements of the vortices, cannot extend beyond the surface more than half the diameter of one of the minute areas of gyration alluded to. Wherefore, then, do these gyrations, when similar in direction, from their concurrence approach each other; when dissimilar in direction move asunder, even when situated comparatively at a great distance?

19. I should consider Ampere's theory as more reasonable, were it founded upon the existence of one fluid; since, in that case, vortices might be imagined without the necessity of supposing an endless and unaccountable separation and reunion of two sets of particles; not only devoid of any property capable of sustaining their alleged opposite gyrations, but actually endowed with an intense reciprocal attraction which must render such gyrations impossible.

But even if grounded on the idea of one fluid, this celebrated hypothesis does not seem to me to account for the phenomena which it was intended to explain. If distinct portions of any fluid do not attract or repel each other when at rest, wherefore should they either attract or repel each other when in motion. Evidently mere motion can generate neither attraction nor repulsion. Bodies subjected to a projectile force gravitate with the same intensity and descend in obedience to terrestrial attraction, through the same perpendicular distance, whether moving with the celerity of a cannon ball, or a planet, or undergoing no impulse excepting those arising from their own unresisted weights.

20. The objections which are thus shown to be applicable in the case of liquids, of which the neighbouring particles are destitute of the reaction requisite to produce the phenomena requiring explanation, must operate with still greater force where ethereal fluids are in question, of which the properties are positively irreconcileable with the phenomena. According both to Franklin and Dufay, bodies, when similarly electrified, should repel each other; yet in point of fact, collateral wires, when subjected to similar voltaic discharges, and of course similarly electrified, become reciprocally attractive, while such wires, when dissimilarly electrified by currents which are not analogous, become reciprocally repulsive.

21. Agreeably to Ampere, an iron bar, situated within a coil of wire subjected to a galvanic current, is magnetized, because the current, in the wire, is productive of an electrical whirlpool about every particle of the metal. When the iron is soft the magnetism, and of course the gyrations of which its magnetism consists by the premises, cease for the most part as soon as the circuit through the coil is broken; but when the iron is in the more rigid state of hardened steel, the gyrations continue for any length of time after the exciting cause has ceased.

22. This theory does not explain wherefore the hardening of the steel should cause the vortical motion to be more difficult to induce yet more lasting when its induction is effected. Evidently the metallic particles must take some part in the process; since it is dependent, for its existence and endurance, upon their nature and their state. Yet no function is assigned to these particles. In fact, it is inconceivable, either that they can participate in, or contribute to the supposed vortical motion.

23. The electrical fluid in an iron bar, cannot form a vortex about each particle, all the vortices turning in one direction, without a conflict between those which are contiguous. In order not to conflict with each other, the alternate vortices would have to turn in different directions, like interlocking cog-wheels in machinery. But in that case, if magnetism be due to currents, the magneto-inductive influence of one set would neutralize that of the other. Again, how can a current, excited by a battery in one circuitous conductor, cause, by dynamic induction, a current in the opposite direction, through another conductor parallel to the first, but insulated therefrom? How can a current of quantity in a ribbon coil, give rise to one of intensity in a helix of fine wire?

24. Having stated my objections to the electrical theories heretofore advanced, it may be proper that I should suggest any hypothetical views which may appear to me of a character to amend or to supersede those to which I have objected. But however I may have been emboldened to point out defects which have appeared to me to be inherent in the theories heretofore accredited, I am far from presuming to devise any substitute which will be unobjectionable. I am fully aware that there is an obscurity as respects the nature and mutual influence of chemical affinity, heat, light, electricity, magnetism and vitality, which science can only to a minute extent dispel.

25. The hypothesis which I now deem preferable is so much indebted to the researches and suggestions of Faraday and others, that, were it true, I could claim for myself but a small share of the merit of its origination.

26. That sagacious electrician employs the following language: "*In the long continued course of experimental inquiry, in which I have been engaged, this general result has pressed upon me constantly, namely, the necessity of admitting two forces or directions of force combined with the impossibility of separating these two forces or electricities from each other.*"—*Experimental Researches*, 1163.

27. Subsequently (1244) after citing another proof of the inseparability of the two electric forces, he alleges it *to be another argument in favour of the view that induction and its concomitant phenomena depend upon* a polarity of the particles of matter!

28. Graham, in his Elements, treating of electricity, alleges that

the "great discoveries of Faraday have completely altered the aspect of this department of science, and suggests that all electrical phenomena whatever involve the presence of matter."

29. Unless the distinguished author, from whom this quotation is made, intended to restrict the meaning of the word matter to ponderable matter, there was no novelty in the idea that electrical phenomena involve the presence of matter, since the hypotheses of Franklin and Dufay assume the existence of one or more imponderable material fluids. But, on the other hand, if the meaning of the word *matter* is only to comprise that which is ponderable, the allegation is inconsistent with the authority cited. According to the researches of Faraday, there is an enormous electrical power in metals, and according to his speculations, such powers must be considered as imponderable material principles, pervading the space within which they prevail, independently of any ponderable atom acting as a basis for material properties; the existence of such atoms being represented as questionable.

Grounds on which a Theory may be advanced.

30. The existence of two distinct electro-polar forces acting in opposite directions, and necessarily connate and co-existent, yet capable of reciprocal neutralization, agreeably to the authority of Faraday and others.

31. General polarity of matter in assuming the solid state, as displayed during crystallization and vegetation of salts; also as made evident by Faraday's late researches, and the experiments and observations of Hunt.

32. That four hundred and thirty atoms which form a cube of potassium in the metallic state, must occupy nearly six times as much space as the same number of similar atoms fill when existing in a cube of hydrated oxide of potassium of the same size; which, besides seven hundred metallic atoms, must hold seven hundred atoms of hydrogen and fourteen hundred of oxygen, in all two thousand eight hundred atoms; whence it follows there must, in the metallic cube, be *room* for six times as many atoms as it actually holds.*

33. With all due deference, I am of opinion that Faraday has not been consistent in assuming that, agreeably to the Newtonian idea of ponderable atoms, the space in potassium not replete with metal must be vacant; since, according to facts established by his researches, or resulting therefrom, an enormous quantity, both of the causes of heat and of electricity, exists in metals. Moreover, agreeably to his recent speculations, those causes must consist of material, independent, imponderable matter, occupying the whole of the space in which their efficacy is perceptible.*

* Silliman's Am. Jour. Sci., v. 48, p. 247. L. & E. Phil. Mag. and Jour., v. 27, p. 136, v. 25, p. 602.

34. To the evolution of the imponderable matter thus associated, the incandescence of a globule of potassium on contact with water, may be explained, since it is the consequence of the displacement of such matter by the oxygen and hydrogen, which, in replacing it, converts the metal into the hydrated oxide called caustic potash.

The existence both of the causes of electricity and heat in metals, is likewise confirmed by the fact, that the inductive influence of a magnet is sufficient to cause all the phenomena of heat, electrolysis and magnetism, as exemplified by the magneto-electric machine. The existence of the cause of heat in metals is also evident from the ignition of an iron rod when hammered, or the deflagration of wire by the discharge of a Leyden battery.

35. The superiority of metals as electrical conductors, may be the consequence of the pre-eminent abundance of imponderable matter entering into their composition, as alluded to in the case of potassium. (32.)

36. It having been shown that in electrical discharges there cannot reasonably be any transfer of matter, so as to justify the idea of their being the consequence either of one current or of two currents, the only alternative seems to be that the phenomena are due to a progressive affection of the conducting medium, analogous in its mode of propagation to waves, as in the case of liquids, or the aerial or ethereal undulations to which sound and light are ascribed. (1, 2, 3, &c. &c.)

37. The idea intended to be conveyed by the word wave, as applied in common to the undulatory affections above mentioned, and that which is conceived to be the cause of the phenomena usually ascribed to one or more electrical currents, requires only that there should be a state of matter, which, while it may be utterly different from either of those which constitute the waves of water, light or sound, may, nevertheless, like either, pass successively from one portion of a mass to another.

38. The affection thus designated may be reasonably distinguished from other waves, as a *wave of polarization*, since the wire acts, so long as subjected to the reiterated discharges of a voltaic series, as if it were converted into innumerable small magnets, situated like tangents to radii proceeding from its axis.

39. But if a polarizable medium be requisite to electrical discharges, as they pass through a space when devoid of *ponderable* matter, there must be some *imponderable* medium through which they can be effected. Hence we have reason to infer that there is an imponderable matter existing throughout

all space, as well as within conductors, which is more or less the medium of the opposite waves essential to electric discharges. Quoting his own language, Davy's experiments led him to consider "that space, (meaning void space,) where there is an appreciable quantity of this matter, (meaning ponderable matter,) is capable of exhibiting electrical phenomena:" also that such phenomena "are produced by a highly subtile fluid or fluids." Moreover, that "it may be assumed, as in the hypothesis of Hooke, Euler, and Huygens, that an ethereal matter susceptible of electrical affections fills all space."*

40. Agreeably to the suggestions above made, all ponderable matter which is liable to be electrified *internally* by electrical discharges, may be considered as consisting of atoms composed of imponderable ethereo-electric particles in a state of combination with ponderable particles, analogous to that which has been supposed to exist between such particles and caloric when causing expansion, liquidity or the aeriform state. Atoms so constituted of ethereal and ponderable particles, may be designated as ethereo-ponderable atoms.

41. A quiescent charge of statical electricity, only affecting the superficies of any ponderable mass with which it may be associated, and having no influence upon the component ethereo-ponderable atoms severally, is not to be ascribed to redundancies or deficiencies of the ethereal matter, but to different states of polarization produced in different sets of the particles of such matter existing about the electrifiable bodies. During the action of an electrical machine, these particles are polarized by the opposite polarities transiently induced in the surfaces subjected to friction; one set of particles going with the electric, the other remaining with the rubber.

42. The particles thus oppositely polarized, severally divide their appropriate polarities with other ethereal matter surrounding the conductors, and this, when insulated, is retained until a further polarization results from the same process. Thus are the ethereo-electric atmospheres respectively surrounding the positive and negative conductors oppositely polarized, and consequently charged to the degree which the machine is competent to induce. Under these circumstances, if a rod be made to form between them a conducting communication, by touching each conductor with one of its ends, the polarities of the ethereo-electric atmospheres by which they are severally surrounded, propagate themselves, by a wave-like process, over the surface of the

* Philosophical Magazine, vol. 60, p. 172. 1822.

conductor, so as to meet midway, and thus produce reciprocal neutralization.

43. In proportion, however, as a wire is small in comparison with the charge, which it may be made the means of neutralizing, the conducting power, seems to be more dependent on the sectional area, and less upon the extent of surface. The reciprocal repulsion of the similarly polarized ethereal particles, must tend always to make them seek the surface, but at the same time, their attraction for the ethereo-ponderable particles composing the wire has the opposite effect, and tends to derange these from their normal polar state of quiescence. In proportion to the degree in which this state is subverted, is the resulting heat, electrolytic power, and electro-magnetic influence. The phenomena last mentioned, are, however, secondary effects consequent to the participation of the ethereo-ponderable matter in the undulations resulting from the statical discharge.

44. Such effects, making allowance for the extreme minuteness of the time occupied by the process, are probably, in all cases, proportional to the degree in which the ponderable matter is effected, up to the point at which it is dissipated by deflagration; but the duration of a statical discharge, being almost infinitely minute for any length of coil which can conveniently be subjected thereto, the electro-magnetic and other effects of a statical discharge are not commensurate with the intensity of the affection of the wire.

45. There is, in fact, this additional reason for the diversity between the electro-magnetic power of a statical discharge, as compared with that of the voltaic series: any wire which is of sufficient length and tenuity to display the maximum power of deflagration by the former, cannot serve for the same purpose in the case of the latter. Moreover, the form of a helix closely wound, so that the coatings may touch, which is that most favourable for the reiteration of the magnetic influence of the circuit upon an iron rod, cannot be adopted in the case of statical discharges, of high intensity, since the proximity of the circumvolutions would enable the ethereal waves, notwithstanding the interposition of cotton or silk, to cross superficially from one to the other, parallel to the axis of the included iron, instead of pursuing the circuitous channel afforded by the helix with the intensity requisite to the polarization of the ponderable atoms.

46. The intensity of the excitement produced by different electrical machines, is estimated to be as the relative lengths of the sparks which proceed from their prime conductors respective ly. Admitting that the relative intensity were merely as the length of the spark, not as the square of that length, still there would be an immense difference between the intensity of a vol-

taic series and that of electrical machines if measured by this test. Large electrical machines, like that at the Polytechnic Institution, London, give sparks at twenty inches and more; while, agreeably to Gassiot's experiments, a Groves battery of 320 pairs, in full power, would not, before contact, give a spark at any distance, however minute. It follows, that, as respects that species of intensity which is indicated by length of sparks, or striking distance, the difference between the electricity of the most powerful voltaic series and electrical machines is not to be represented by any degree of *disparity;* it is rather an utterly discordant feature; it is a trait in which there is an extreme dissimilitude.

47. It should be recollected that the intensity of galvanic action in a series of 320 pairs, excepting the loss from conduction, would be to that of one pair as 320 to one. *

48. We may infer that the undulatory polarization of ethereo-ponderable matter, is the primary, direct, and characteristic effect of galvanic excitement in its more energetic modifications. Yet that by peculiar care in securing insulation, as in the water batteries of Cross and Gassiott, ethereal undulations may be produced, with the consequent accumulation of ethereal polarity requisite to give sparks before contact, agreeably to the experiments of those ingenious philosophers. Hence it may be presumed, that, during intense electro-ponderable polarization, superficial ethereal waves may always be a secondary effect, although the conducting power of the reagents, requisite to the

* According to Colomb's experiments, electrical attraction and repulsion are as the squares of the distances, and the force of the inductive power of statical charges which are produced by those forces, must, of course, obey the same law. Also the spark which is the result of these powers should come under this law since it must be as the generating forces. That the inductive influence has a growth commensurate with the electrifying energy is shewn by the fact ascertained by Wheatstone, that, when a jar is discharged by two very long wires, the sparks at the two ends are simultaneous, though one produced midway by the same discharge, when tested by his ingenious process, is later in a minute degree. It follows, that the spark must be as the precursory generating induction, and, of course, obedient to the same rule.

If this calculation be correct, the intensity must be as the squares of the striking distances as indicated by sparks.

It may be urged that the striking distances as measured by the length of the sparks, is in the compound ratio of the quantity and intensity. As to the quantity, however, galvanic sources have always been treated as pre-eminent in efficacy, so that on that side there could be no disparity. Moreover I have found that in galvanic apparatus, of only one or even of two pairs, as in the calorimotors, the intensity lessened as the surfaces were enlarged. By a pair of fifty square feet, of zinc surface, a white heat could not be produced in a wire of any size, however small. The calorific power of such apparatus can only be made evident by the production of a comparatively very low temperature, in a comparatively very large mass

constitution of powerful galvanic batteries, is inconsistent with that accumulation of ethereal polarity which constitutes a statical spark-giving charge.

49. In a battery consisting of one galvanic pair excited by reagents of great chemical energy, and conducting power, the calorific and electro-magnetic effects are pre-eminent; but in De Luc's electric columns, consisting of several thousands of minute pairs, feeble as to their chemical and conducting efficacy, statical phenomena predominate. This seems to be quite consistent, since on the one hand the waves of polarization must be larger and slower, as the pairs are bigger and fewer; and on the other hand smaller and more active, as the pairs are more minute and more numerous. Of course the more active the polarizing waves, the more extensive must be the sphere of their influence.

50. The extent of metallic surface being constant, the greater the number, the smaller the pairs, and the less the retro-conducting power of the exciting reagents, the greater the resemblance of the phenomena to purely statical electricity, since the ratio of the ethereal to the ethereo-ponderable waves is in that construction the greatest: vice versa, the smaller the number and the larger the pairs, or the more intense the reaction of the ponderable agents, the more the phenomena prevail, heretofore ascribed to quantity, but really due to the greater proportional association of ponderable matter in the atoms subjected to the electro-polar forces.

51. If, by means of a sieve, or any other means, iron filings be duly strewed over a paper, resting on a bar magnet, they will all become magnets, so as to arrange themselves in rows like the links of a chain. Each of the little magnets thus created, will have a polarity opposite to that of the pole of the bar magnet, which influences it at its end nearest that pole. Of course the resulting ferruginous rows formed severally by the two different poles of the bar, will have polarities as opposite as those of the said poles.

52. In an analogous mode, if two wires be made the media of a galvanic discharge, iron filings, under their influence, will receive a magnetic polarity, arranging themselves about each wire like so many tangents to as many radii proceeding from its axis. Those magnetized by one wire reacting with such as are magnetized by the other.

53. The affections of the ferruginous particles during the continuance of the current so called, are precisely like those of the same particles when under the influence of the bar magnet. The great discordancy is in the fact, that the influence of the magnet is perma-

* As the word ether is used in various senses, the syllables "*electro*" being prefixed, serve to designate that which is intended.

nent, while that of the wire is indebted for existence to a series of oppositely polarizing but transient impulses which proceed towards the middle of the circuit from each side, so as to produce reciprocal neutralization by meeting midway.

54. The effect upon the filings, as originally pointed out by Oersted, is precisely such as would arise were the ponderable matter of the wire, resolved by each impulse into innumerable little magnets, situated so as to form tangents to as many radii proceeding from the axis of the wire.

55. Independently of the filings, the wires react with each other as if their constitution, during subjection to the discharge, were such as above supposed. When the discharges through them concur in direction, they attract, because the left side of one is next the right side of the other, bringing the opposite poles of their little magnets into proximity; but when the discharge is made in opposite directions, the two right or the two left sides will be in proximity, and will, by the consequent approximation of the similar poles of the little magnets, be productive of repulsion.

56. From these last mentioned facts and considerations, it must be evident that, assuming the existence of a permanent polarity in the particles of a magnetized bar, and of transient equivalent polar affections within a galvanized wire, involves no contradiction, no absurdity, nor any thing but what is consistent with the researches and inferences of Davy, Faraday, and other eminent investigators of the phenomena of nature.

57. In order that an ethereo-ponderable particle of oxygen in any aqueous solution shall unite with an ethereo-ponderable particle of zinc in a galvanic pair, there must be a partial revolution of the whole row of ethereo-ponderable zinc atoms, with which the atom assailed is catenated by the attractions between dissimilar poles. Moreover, at the same time that the metallic atoms are thus affected, the atoms of water between the metallic surfaces must undergo a similar movement, by an analogous reaction with poles of an opposite character, and this movement must extend through the negative plate to the conductor by which it communicates with the zinc or electro-positive plate. When the circuit is open, the power of combination exercised by the zinc and oxygen is inadequate to produce this movement in the whole chain of atoms, liquid and metallic; but as it is indifferent whether any two atoms are united with each other, or with any other atoms of the same kind, the chemical force easily causes them to exchange partners, as it were, when the whole are made to form a circuitous row in due contiguity.

58. As we know that during their union with oxygen, metals give out an enormous quantity of heat and electricity, (33) it is reasonable to suppose that whenever an atom of oxygen and an atom of zinc jump into union with each other, a wave is induced in the

ethereo-ponderable matter, and that this wave is sustained by the decompositions and recompositions by means of which an atom of hydrogen is evolved, at the negative plate, and, probably, enabled to assume the aëriform state. There must, at the same time, be a communication of wave polarity by its contact with the surface of the negative plate, by which the positive wave in the conductor is induced. Although the inherent polarities of the metals are not, agreeably to this view, the moving power in galvanism, yet they facilitate, and in some cases induce the exercise of that power, by enabling it to act at a distance, when otherwise it might remain inert.

59. This, I conceive, is shown in the electrolytic effect of platina upon a mixture of the gaseous elements of water; also in Groves' *gas* battery, by means of which hydrogen and oxygen gas severally react with water in syphons, so as to cause each other to condense, without any communication besides that through the platina, and an electrolytic decomposition and recomposition extending from one of the aqueous surfaces in contact with one of the gases, to the other surface in contact with the other gas.

60. The various forms of the electric spark, resulting from varying the gas, through which it may be made to pass, agreeably to the researches of Faraday, is explained by the supposition that the luminosity of the spark is partially the consequence of the polarizability of the ethereo-ponderable atoms of the gases through which the discharge is made, and consequently varies with their nature.

61. The reciprocal influence of galvano-electrical currents, and of such currents with magnetized or magnetizable masses, are well designated as *electro*-magnetic or *magneto*-electric, accordingly as the current or the magnet is the primary agent. There are, however, two other species of electro-polarity which come under the head of statical electricity. One of these Faraday illustrates by supposing three bodies, A, B and C, in proximity, but not in contact, when A, being electrified, electrifies B, and B electrifies C by induction. This Faraday calls an *action* of the particles of the bodies concerned, whereas, by his own premises, it appears to me to be merely a superficial affection of the masses or of a circumambient ethereal matter. This species of polarization, to which the insulating power of air is necessary, affects the superficies of a body only,* being displayed as well by a gilt globe of glass, as a solid globe of metal. No sensible change appears to be produced in the ponderable conducting superficies by this inductive superficial electrification of masses; and hence, probably, there is no consequent magnetism.

62. The other instance of statical polarity, is exemplified by the charge existing in a coated pane or jar. In this case, according to Fara-

* According to Colomb and others.

day, the particles of glass are thrown into a state of electro-polarity, and are, in fact, partially affected as if they belonged to a conductor; so that insulators and conductors differ only in the possession in a high degree by the one, of a susceptibility of which the other is possessed to an extent barely perceptible. The facts seem to me only to show, that either an insulator or conductor may be both affected by the same polarizing force, the transmission of which the one facilitates, the other prevents. I am under the impression that it is only by the diruptive process that electricity passes through glass; of course involving a fracture. It gets through a pane or jar, not by aid of the vitreous particles, but in despite of their opposing coherence. The glass in such cases is not liable to be fused, deflagrated, or dissipated, as conductors are. It is forced out of the way of the electrical waves, being incapable of becoming a party to them. Discharges will take place through a vacuity, rather than through the thinnest leaf of mica. But if, as Faraday has alleged, from within a glass flask hermetically sealed, an electrical charge has been found to escape, after a long time, it proves only that glass is not a perfect insulator, *not "that perfect insulation and perfect conduction are different extremes of the same property."* On the contrary, the one is founded upon a constitution competent to the propagation within it of the electro-polarizing waves, with miraculous facility, while the other is founded either on an absolute incapacity, or comparatively an infinitely small ability to be the medium of their conveyance. The one extremely retards, the other excessively expedites its passage through a void.*

63. I infer that the magnetic influence of electricity, is always due to the electro-polarization of ponderable matter, in consequence of the incorporation with it of the polarizable electro-ether,* thus constituting, as above stated, ethereo-ponderable atoms.

64. Reference has been made to two modes of electrical conduction, in one of which the efficacy is as the surface; in the other, as the area of a section of the conductor. Although glass be substantially a non-conductor, the power of the surface of glass when moistened, or gilt, to discharge statical electricity is enormous. It has been generally considered, that as a protection against lightning, the same weight of metal employed as a pipe, would be more efficacious than in the usual solid form of a lightning rod: yet this law does not hold good with respect to galvanic discharges, which are not expedited by a mere extension of conducting surface. Independently of the augmentation of conducting power, consequent to the cooling influence of radiation, and contact with the air, which, according to Davy, promotes conduction, a metallic ribbon does not

* By a void, I mean a Torricillian vacuum. The omnipresence of the electro-ether must render the existence of a perfect void impossible.

conduct a galvanic current better than a wire of similar weight and length.

65. The sectional area of a conductor remaining the same, in proportion as any *statical* accumulation which it may discharge is greater, the effects are less superficial; and the ethereo-ponderable atoms are affected more analogously to those exposed to galvanic discharges. It is in this way that the discharge of a Leyden jar imparts magnetic polarization. Thus, on the one hand, the electro-ethereal matter being polarized and greatly condensed, combines with and communicates polarization, and consequently magnetism, to ethereo-ponderable bodies; while, on the other hand, these, when polarized by galvanic reaction, and thus rendered magnetic, communicate polarity to the electro-ether. Hence statical electricity, when produced by galvanism, and magnetism, when produced by statical electricity, are secondary effects.

66. Where a wire is of such dimensions, in proportion to the charge, as to be heated, ignited, or dispersed by statical electricity, there seems to be a transitory concentration of the electric power, which transforms the nature of the reaction, and an internal wave of electro-ponderable polarization, similar to those of galvano-electricity, is the consequence.

67. As above observed, (34,) the current produced by the magneto-electric machine, has all the attributes of the galvano-electric current; yet this is altogether a secondary effect of the changes of polarity in a keeper, acting upon a wire solely by dynamic induction. But if, by mere external influence, the machine above mentioned can produce within a circuit a current such as above described, is it unreasonable to suppose that the common machine, when it acts upon a circuit, may put into activity the matter existing therein, so as to produce waves of polarization, having the power of those usually ascribed to a galvano-electrical current?

68. It has been shewn that both reason, and the researches and suggestions of Faraday, warrant the inference that ponderable atoms, in solids and liquids, may be considered as swimming in an enormous quantity of condensed imponderable matter, in which all the particles, whether ponderable or imponderable, are, in their natural state, held in a certain relative position due to the reciprocal attraction of their dissimilar poles. An electrified body differs from one in its ordinary state, in having the polarity of the ponderable or imponderable matter existing within, or about it, one or *both* deranged.

69. In statical excitement the affection is superficial as respects the ponderable bodies concerned, while in dynamic excitement the polarities of the whole mass are deranged oppositely at opposite ends of the electrified mass; so that the oppositely

disturbing impulses, proceeding from the poles of the disturbing apparatus, neutralize each other intermediately. Supposing the ponderable as well as the imponderable matter in a perfect conductor, to be susceptible of the polar derangement, of which an electrified state is thus represented to consist, non-conductors to be insusceptible of such polar derangement, imperfect conductors may have a constitution intermediate between metals and electrics. When an electrical discharge is made through any space devoid of air or other matter, it must then find its way solely by the polarization of rare imponderable matter existing therein; and consequently its corruscations should be proportionably more diffuse, which is actually found to be true; but when gaseous ethereo-ponderable atoms intervene, they enable competent waves to exist within a narrower channel, and to attain a greater intensity. I consider all bodies as insulators which cause discharges through them to be more difficult than through a vacuum, and which, consequently, cannot be made to convey the waves from one body to another when the transfer would not take place in their absence. This furnishes a good mean of discrimination between insulators and conductors, the criterion being that a discharge ensues more readily as there is more of the one and less of the other in the way. Even when a bell wire has been dissipated by lightning, it has been found to facilitate and determine the path of the discharge. Both in the case of disruptive discharge through air, producing a spark, or of a deflagrating discharge through wire, causing its explosion, there is a dispersion of intervening ponderable particles; and yet there is this manifest discordancy, that in the one case the undulatory process of transfer is assisted, in the other resisted. The waves follow the metallic filament with an intense attraction, while they strive to get out of the way of those formed by the aëriform matter, as if repelled. Hence the term diruptive, from dirumpo, to break through, was happily employed by Faraday to designate spark discharges. The zigzag form of the diruptive spark, shows that there is a tendency in the aëriform particles to turn the waves out of that straight course, which, if unresisted or facilitated, they would naturally pursue. On the one hand the aërial filaments being unsuitable for the conveyance of the electric waves, they are forced by them out of the normal path, first in one direction, then in another; while, on the other hand, the finest metallic filament furnishes a channel for the electric waves, so favorable that this channel is pursued, although the consequent polarization of the conducting particles be so intense as to make them fly asunder with explosive violence.

70. When a small image, of which the scalp has been

abundantly furnished with long hair, is electrified, the hairy filaments extend themselves and move apart, as if actuated by a repulsive power: also when iron filings are so managed as to obey the influence of the poles of a powerful magnet, they arrange themselves in a manner resembling that of the electrified hair. There is, moreover, this additional analogy, that there is an attraction between two portions of hair differently electrified, like that which arises between filings differently magnetized.—Yet the properties of the electrified hair and magnetized filings are, in some respects, utterly dissimilar. A conducting communication between differently electrified portions of hair would entirely neutralize the respective electrical states; so that all the electrical phenomena displayed by them would cease. Yet such a communication made between the poles, exciting the filings, by any non-magnetic conductor, does not in the slightest degree lessen their polar affections and consequent power of reciprocal influence. Upon the electrified hair, the proximity or the contact of a steel magnet has no more effect than would result under like circumstances from any other metallic mass similarly employed; but by the approximation, and still more, the contact, of such a magnet, the affection of the filings may be enhanced, lessened, or nullified, according to the mode of its employment. In the case of the hair, the affection is superficial, and the requisite charging power must be in proportion to the extent of surface. In the case of the magnetized ferruginous particles, it is the mass which is affected, and, cæteris paribus, the more metal, the greater the capacity for magnetic power. In the instance of the electrified hair, as in every other of statical excitement, the electrical power resides in imponderable ethereo-electric atmospheres which adhere superficially to the masses, being liable to be unequally distributed upon them in opposite states of polarity, consequent to a superficial polarization of the exciting or excited ponderable masses; but in the instance of bodies permanently magnetic, or those rendered transiently magnetic by galvanic influence, the ethereo-electric matter and the ponderable atoms are inferred to be in a state of combination, forming ethereo-ponderable atoms; so that both may become parties to the movements and affections of which the positive and negative waves consist. Since the electro-polarization, when carried to a certain degree of intensity, produces ignition, at other degrees deflagration, decomposition, or dispersion of conductors, it may be conceived, that in discharges too feeble to produce these consequences, there is still proportionably an affection of the ponderable matter.

71. I infer that the difference between the phenomena of statical electricity and those of galvanism does not arise from a

difference in quantity and intensity, but from the greater or less extent in which the polarity of the ponderable atoms of the masses affected are deranged. All magneto-polar charges, I infer to be attended by an affection of ponderable particles; and the reason why the most intense statical charge does not affect a galvanometer, is that it is only when oppositely excited bodies are neutralized by the interposition of a conductor, as during a discharge, that ethereo-ponderable particles are sufficiently polarized to enable them to act upon others in their vicinity, so as to produce a polar affection the opposite of their own. In this way dynamic induction is consistently explained, by supposing that the waves of polarization, in passing along one conductor, produce, pari passu, the opposite polarization in the proximate part of any neighboring conductor suitably constituted, situated and arranged to allow it to form a part of a circuit. A magnetized bar, so contrived as to rotate easily upon its axis, turns to the right or to the left, when made the channel of two opposite galvanic discharges, accordingly as the connections with the battery may be made. This may be explained by supposing that the opposite undulations (consistently with Oersted's idea) moving spirally, one to the right the other to the left, react with the polarized ethereo-ponderable particles of the magnetized bar, so as to produce revolutionary impulses.

72. It is only during the state of the incessant generation and destruction of what has been called the two electricities, that the circuit, which is the channel for the passage of the polarizing waves, is endowed with electro-magnetic powers. It was no doubt, in obedience to a perception of this fact, that Oersted ascribed the magnetism of a galvanised wire to a conflict of the electricities. Undoubtedly that state of a conductor in which, by being a part of an electrical circuit, it becomes enabled to display electro-magnetic powers, is so far a conflict of the two electricities, as the affections of matter which are denominated electrical consist of two opposite polar forces, proceeding, agreeably to the language of Faraday, in opposite directions from each side of the source, and conflicting with each other so as to be productive of reciprocal annihilation.

73. That a corpuscular change in conductors is concomitant with their subjection to, or emancipation from, a galvanic current, is proved by an experiment of Henry's, which he afforded me an opportunity, on one occasion, of witnessing. I allude to the fact that sound is produced whenever the circuit is suddenly made or suddenly ruptured. By I. P. Marrian it has been observed, that a similar result takes place during the magnetization or demagnetization of iron rods, by the alternate establishment or arrestation of galvanic discharges through wires coiled about them so as to convert each into an electro-magnet. Mr. Marrian represents

the sound as resembling that produced by striking a rod upon one of its ends.* †

74. Thus it appears that there is an analogy between the state of matter which involves permanent magnetism and that which constitutes a galvanic current, so far as this; that either by one or the other, during either its access or cessation, an affection of the ponderable particles concerned ensues, sufficient to produce sound.

75. Although waves originally purely ethereal, as when generated by a discharge from a conductor or Leyden jar, are prone to pass superficially; yet as the surface of the conducting wire becomes less, the reaction between the ethereal and ethereo-ponderable matter becomes greater; so that finally deflagration may be produced. Hence the inferiority of statical discharges in producing electro-magnetic power is explained by the fact, that this power being in the compound ratio of the quantity of matter affected and the intensity of the affection, neither condition can be augmented without a diminution of the other. In order to produce the intensity requisite to the polarization of the ponderable particles, we must lessen the number of these subjected to the discharge, and, of course, the numerical force which can be brought into the electro-magnetic battle-field.

Summary.

From the facts and reasoning which have been above stated, it is presumed that the following deductions may be considered as highly probable, if not altogether susceptible of demonstration.

The theories of Franklin, Dufay and Ampere, are irreconcilable with facts on all sides admitted.

A charge of statical electricity, or that species of electric excitement which is produced by friction, is not due to any accumulation, nor any deficiency either of one or of two fluids, but to the opposite polarities induced in imponderable ethereal matter existing throughout space however otherwise void, and likewise condensed more or less within ponderable bodies, so as to enter into combination with their particles, forming atoms which may be designated as ethereo-ponderable.

Statical charges of electricity seek the surfaces of bodies to which they may be imparted, without sensibly affecting the ethereo-ponderable matter of which they consist.

When surfaces thus oppositely charged, or, in other words, having about them oppositely polarized ethereal atmospheres,

* Agreeably to recent experiments of Faraday, the particles of a glass prism may be so influenced by an electro-magnet as to affect the passage of polarized light.

† L. and E. Phil. Mag. and Jour., vol. 45, p. 383, 1844.

are made to communicate, no current takes place, nor any transfer of the polarized matter: yet any conductor touching both atmospheres, furnishes a channel through which the opposite polarities are reciprocally neutralized by being communicated wave-like to an intermediate point.

Galvano-electric discharges are likewise effected by waves of opposite polarization, without any flow of matter meriting to be called a current.

But such waves are not propagated superficially through the purely ethereal medium; they occur in masses formed both of the ethereal and ponderable matter. If the generation of statical electricity, capable of influencing the gold leaf electrometer, indicate that there are some purely ethereal waves induced by the galvano-electric reaction, such waves arise from the inductive influence of those created in the ethereo-ponderable matter.

Magnetism, when stationary, as in magnetic needles and other permanent magnets, appears to be owing to an enduring polarization of the ethereo-ponderable atoms.

The magnetism transiently exhibited by a galvanized wire, is due to oppositely polarizing impulses, severally proceeding wave-like to an intermediate part of the circuit where reciprocal neutralization ensues.

When magnetism is produced by a statical discharge operating upon a conducting wire, it must be deemed a secondary effect, arising from the polarizing influence of the ethereal waves upon the ethereo-ponderable atoms of the wire.

Such waves pass superficially in preference; but when the wire is comparatively small, the reaction between the waves and ethereo-ponderable atoms becomes sufficiently powerful to polarize them, and thus render them competent, for an extremely minute period of time, to produce all the affections of a galvano-electric current, whether of ignition, of electrolysis, or magnetization. Thus, as the ethereo-ponderable waves produce such as are purely ethereal, so purely ethereal waves may produce such as are ethereo-ponderable.

Polarization of hair upon electrified scalps is supposed to be due to purely ethereal polarity, while that of iron filings, by a magnet or galvanized wire, is conceived to be owing to ethereo-ponderable polarity.

On Strictures of the Urethra. By JAMES BRYAN, M. D., Lecturer on Surgery, formerly Professor of Surgery in Castleton, Vermont, late Surgeon and Physician to the Philadelphia Dispensary, Member of the Philadelphia Medical Society, &c. &c.

In the whole range of surgical disease, there is unquestionably no one more inconvenient, distressing and obstinate, than "Stricture of the Urethra." Confined, as it is, to no age,—for according to the best authorities, it is found in youth and childhood,—continuing, as it generally does, during the whole of life after an attack, liable to occur at any moment, and placing in jeopardy the very life of the individual—it has ever been a subject of deep interest to the surgeon.

Unlike many other serious and persistent diseases, it is, unfortunately, one of very common occurrence. If, as Dr. Hunter says, "nearly every man has had gonorrhœa," so we may say, a large per centage, of those who have been thus afflicted, have obstructions to the free passage of the urine, in some form or other. Strictures of the urethra may be classified as follows: 1st, Spasmodic stricture. 2d, Permanent stricture. 3d, A combination of the first two.

Spasmodic Stricture.

Spasmodic stricture is a a simple closure of a portion of the urethral canal, by the contraction of some of the muscular fibres which surround it. This spasm may be in the circular fibres of the urethra itself; the compressores urinæ, or other portions of the muscular tissue, acting upon the passage. It is induced by some irritation, either local or general, either in the urethra itself, or acting upon some distant part, and producing the disease by sympathy. Like other diseases of this nature, it is found most frequently in persons of a nervous and excitable temperament. The irritation of gonorrhœa, in any or all of its stages, produces this form of stricture; it is not of course in this, or in purely sympathetic cases, dependent upon organic changes, in the form of deposits, for its existence. Although very distressing for the time being, producing for hours together complete suppression of the urinary discharge, yet it must be considered as a temporary disease. The application of cold water to the parts and cold to the feet, as recommended by Dr. Hall—or the reverse, warm baths, pediluvia and semicupia—are means which very frequently succeed in relaxing the stricture. In addition to these, the introduction of a catheter or sound, the use of opiate enemata, or, according to Dr. Hunter, "the crumb part of a new baked loaf,

warm from the oven, applied to the perineum;" a blister to the groin; hot steam to the scrotum and perineum, &c. &c. Of all these, the best by far and most certain, as well as the most expeditious, is the introduction of the catheter, previously warmed and oiled for the purpose. I have found it advantageous, in cold weather, either to allow the patient to remain in bed, or be in a warm room during the introduction of this instrument.

In some cases the disease assumes the character of periodicity, and I have had to evacuate the bladder at stated periods for several days, before the disease gave way, and this entirely independent of that form of stricture which sometimes takes place during the cold stage of an intermittent fever. When caused by some local irritation, the final cure of the disease must of course be sought by the removal of the cause. The old adage need scarcely be repeated, which says that "the removal of the cause cures the effect."

Permanent Stricture.

"A permanent stricture" (says Sir Everard Home) "is that contraction of the canal which takes place in consequence of coagulable lymph being exuded between the fasciculi of muscular fibres, and *upon* the internal membrane, in different quantities, according to circumstances; and, in the same proportion, diminishing the passage for the urine at that part, or completely closing it up."

This form of the disease is the result of inflammatory action in the tissues around the urethra, producing a deposit of coagulable lymph, which, by its bulk, infringes upon the diameter of the passage. As a general rule, the deposit is slow in its progress, and requires a considerable time to attain sufficient size to materially interfere with the passage of the urine. The symptoms consequently develope themselves gradually. Most generally, the origin, according to Sir A. Cooper, may be distinctly traced to one or more attacks of gonorrhœa, and this agrees with our experience. At the same time wounds of the parts, particularly contused wounds—a transfer of inflammatory action from neighbouring parts—are known to produce the same effects. The character which these deposits assume, (and they do *not involve* the lining membrane *of the urethra*, which, on the contrary, is corrugated in folds in the passage, over the uneven surface,) is that of a hard cartilaginous ring, partial or complete. The extent of the deposit, which may be felt through the parietes, as a hard substance along the urethra, varies considerably. According to Hunter and others, it is generally not greater than that represented by a *pack thread*, tied around the canal. Sir B. Brodie speaks of its being sometimes an inch or

an inch and a half in extent; and in a case which was treated by myself, it extended more than two inches along the passage, and could be felt externally by the patient and surgeon with the finger. Mr. Samuel Cooper, in his Surgical Dictionary, mentions a case of fistula where the entire urethra beyond, was closed. The number of strictures also varies in the same case; in many cases there is but one; in others there are two, three, or more strictures. As the diameter of the passage varies in different parts of its course, so the *seat* of stricture varies. Where the diameter is diminished or curved, the predisposition to stricture seems to be greater than in other parts. Hence the curve of the canal and the *bulb*, as it is called, are very commonly seats of the disease. In my experience, I have found that the most common seat is about 5½ inches from the external orifice; next to this, about 7 or 7½ inches; and lastly, about 3½ or 4 inches from the extremity of the penis. I have also seen them just within the orifice, and so small that a fine violin string of catgut, or small straws, were used by the patient to keep them open for urination.

Symptoms.

The first symptom of stricture is the obstruction, more or less complete, which it causes to the free passage of the urine. The stream will be changed in shape, forked, turned from its usual course, or fall perpendicularly from the mouth of the urethra in great drops and scattering. Some few drops will be retained in the passage, which will pass off after the rest, producing considerable inconvenience. The patient sometimes has to get up at night two or three times to evacuate his bladder, which is done with difficulty and with considerable effort. A weight and uneasiness is felt in the region of the perineum, and not unfrequently a gleety discharge issues from the urethra, which may be mistaken for gleet itself. The stream of urine gradually diminishes, inducing strong, "straining" efforts to accelerate it, until almost no stream passes, and the urine falls in drops or stops entirely. The latter, however, generally occurs after exposure to cold or other causes of inflammation, which, setting in, in the strictured part, closes the passage entirely;—or the closure may be induced by the spasmodic action of the muscles, as we shall see when speaking of the combined form of the disease. From a few weeks to eight or ten or more years, may, however, pass in the progress of the disease, ere this state of things takes place. One case lately treated by me, resulted from a very severe attack of gonorrhœa, contracted nine years before. The progress of the disease was gradual, until relieved by an operation. In another case, also cured by an operation, rather more than three years had elapsed. In a third case, about one

year, with repeated gonorrhœas, had induced a confirmed stricture.

In the early stages there is commonly very little pain or inconvenience; the impediment to free urination, which the patient may refer to any other cause than the right one, being the only symptom. In some cases considerable pain accompanies the disease. A patient now sitting by me says, to the question in reference to pain, that he never had any, but adds, that "now and then" he would feel pain in the vicinity of the anus, apparently rheumatic, which would wake him up at night, and would be relieved by pressure. The pain existed particularly when he was costive. Never suspected a stricture; the stream, he says, gradually diminished, but was variable. For a few days the obstruction would be considerable, and then for a month or two, it would be as usual, never, however, returning to the natural size of the stream. These paroxysms gradually became more frequent, the urine "dribbling" away with difficulty, until at length it entirely ceased, and he was forced to apply for immediate relief. The difficulty in urinating not only varied on different days, but at different times in the same day. An attempt in the morning would sometimes be a partial failure; an hour or two after, the attempt would be more successful. It affected his mind, and was itself affected by mental emotions. The latter, particularly anxiety of mind, increased the difficulty, while the appetite and spirits were affected by the disease. This, in fact, is known to be the case in most of the diseases involving the urinary or genital organs. One patient tells me that the venereal appetite in him, although of a pretty warm temperament, has been for years merely passive. The testicle, one or both, it is well known, also, sometimes become enlarged and painful, which may be mistaken for a very different disease. Whether the disease affects the procreative function or not, I am not able to say; but two gentlemen, both married men of four or five years standing, have neither of them children, and they attribute the fact to the disease.

Mixed Stricture.

The mixed form of the disease is one exceedingly common. The local irritation of the sub-inflammation, which no doubt exists in the stricture deposit, is sufficient to excite the spasmodic action of the muscular fibres, longitudinal or other, especially in nervous individuals. And these spasms are frequent sources of great pain and considerable danger. They no doubt react upon the strictured part, and assist in keeping up that amount of irritation which is essential to the progress of the disease. In these cases we have all the symptoms of simple spasmodic stricture, made more or less permanent by the perma-

nent deposits. The other and more general symptoms are all more intense from the general susceptibility of the system.

Consequences.

The consequences of long continued obstruction and stricture on the bladder and neighbouring organs are various. The bladder becomes, from the increased action, thickened and contracted, so that it sometimes will contain not more than one-fourth of the normal amount of urine. Hence the frequent disposition to evacuate this viscus. The mechanical obstruction, continuing for a certain length of time, will induce ulceration of the urethra, opening through the perineum; and we may have one or more fistulæ in perineo. This takes place sometimes in a short time, from acute inflammation setting in, establishing the suppurating process, which, in most cases, opens through the perineum. In other cases, when relief to the permanent obstruction of the passage is not obtained speedily, we may have rupture of the urethra or bladder, by which the urine is infiltrated into the neighbouring cellular tissue, and mortification and gangrene of the parts follow. Even death may be the consequence of this accident. We are of the opinion, however, that this result, particularly the phlegmonous inflammation opening in the perineum, can be avoided in most cases by the judicious surgeon. Some of our best writers speak of this as a matter of common occurrence. Certainly when it depends on the mechanical obstruction of a stricture, it ought to be avoided; the passage being easily opened by a proper instrument for that purpose. The enlargement of the ureters and pelvis of the kidneys, with more or less disease of the latter, are consequences of long continued obstruc tion of any kind in the urinary passages.

Treatment of Stricture.

The treatment necessarily divides itself into that which is appropriate to spasmodic, permanent, or the mixed form of the disease. In reference to the first, where it is simple and uncomplicated, the methods stated under the caption, "spasmodic stricture," will be found generally successful; being merely symptomatic or nervous. The modes of treatment there mentioned, particularly for immediate relief, the introduction of a moderate sized, smooth, warm, well oiled metallic sonnd, will be found effectual. The use of terebinthinates, opiates, or anti-spasmodics may be proper for the purpose of permanently curing the disease. Where some irritation, either in the organs of digestion, on the general surface, (such as a blister, for instance) or in the bladder, produces the disease, the removal of the irritation will result in the cure of the stricture.

Treatment of Permanent Stricture.

This is divided by most authors into dilatation, cauterization and scarifications, followed by dilatation. The invention of the bougie and flexible catheter was considered by John Hunter as a very great improvement, in the treatment of strictures and other diseases of the urinary organs. And from that time to the present, they have been extensively used, not to say abused, in the treatment of strictures. Every tyro thinks he must try his skill in introducing this foreign body into the urethral passage. Precise instructions are given as to the mode of operating to effect this purpose, almost all of which, it is acknowledged, fail to ensure success. The curves of the canal—its unequal diameters—the fold and lacunæ of the lining membrane—the spasmodic action of the longitudinal and circular fibres—the contractions of the sphincter vesicæ, enlargements of the so-called third lobe and lateral lobes of the prostate gland, in addition to the very obvious one of permanent stricture, or morbid growth in the passage—are all so many difficulties which frighten the novice in his timid attempts at the introduction of a proper instrument. Our predecessors do not, however, seem to have been so timid; but, from their own experience, no doubt, caution us against using too much force, and either bruising the parts or producing an "artificial passage," and not always in the right direction, even the rectum having been entered, according to some writers. In these cases it is evident that a very unwarrantable amount of force must have been injudiciously applied. The very irregular course of the passage when several strictures exist, makes it necessary to be careful, and to *humour* the parts during the introduction of the instrument. As a general rule, we agree with the distinguished teacher, Professor W. Gibson, that a metallic sound, of proper or moderate dimensions, warm, and well oiled, is the easiest introduced: metallic catheters, not too large, come next. The passage seems to become straight, or rather the inequalities yield better, to these instruments, particularly when they fill well the diameter of the canal. I have seen a spasmodic stricture overcome in this way when all others had failed.

The process of dilatation presupposes of course the introduction of some dilating body—which shall press outwards the parietes of the stricture or strictures. Where the contraction is considerable, a very small bougie is gradually introduced and allowed to remain, sometimes for several hours. After this, one a size larger, say the next day or shortly after, this to be followed by one still larger, until the diameter is increased to the natural size. Dr. Physick, we have understood, was accustomed to require his pa-

tient to obtain for himself a dozen bougies and catheters, of assorted sizes; from the smallest up to one almost twice as large as the natural size of the canal. Dilatation was carried to the extent of enlarging the urethra to a very considerable extent beyond the usual size. This was with the view of preventing too sudden contraction in the strictured part afterwards—which, however, was almost sure to take place, particularly in the cartilaginous forms of the disease where Sir B. Brodie says the dilation is "so important."

There are we believe, at least two forms of permanent strictures, perhaps three, in which something like a radical cure may be expected from the introduction of the metallic dilator. These are: firstly; the thread-like stricture, which divides the passage in the form of a thin diaphragm, and is torn by the instrument in an attempt to part it. The hemorrhage which follows, indicates the rupture of some small vessels. We have seen a number of cases where this appeared to be the case; and the cures were at once complete and permanent. Secondly, when soft, fleshy or polypic growths obstruct the passage, as they do those of the ears, rectum or uterus, these bodies being of a soft friable nature, easily give way, and are destroyed by the solid instrument. Thirdly; in the case of simple bands, as explained by Sir A. Cooper, when these bands are not too strong and resistent; they are perforated, and broken up by the means taken to dilate the urethra.

With regard to the use of the gum catheters, in strictures, Sir B. Brodie, after decribing the mode of introduction, &c.—points out the cases to which he conceives them to be applicable, as follows:—"1stly. When time is of much value, and it is of great consequence to the patient to obtain a cure as soon possible.

2dly. When a stricture is grisly and cartilaginous, and therefore not readily dilated by the ordinary methods.

3dly. Where from long continuance of the disease the urethra has become irregular in shape; or where a false passage has been made by previous mismanagement. Under these circumstances, if you can succeed in introducing a gum catheter, and let it remain for a few days in the bladder, you will find your difficulties at an end; the irregularities will disappear, and the false passages will heal.

4thly. Where a severe rigor follows each introduction of the bougie. This disposition to rigor is such, that it is impossible to proceed with the treatment in the ordinary way. Observe, in these cases, when the rigor takes places, it seldom follows the use of the bougie immediately. It almost always occurs soon after the patient has voided his urine, and seems to arise, not as the immediate effect of the operation, but in consequence

of the urine flowing through the part which the urine has dilated. Now, if instead of a bougie, you use a gum catheter, and allow it to remain, the urine flowing through the catheter, the contact of it with the urethra is prevented, and the rigor is prevented also."—*Braithwaite.*

We beg leave to differ from the Baronet in reference to the two first cases mentioned. We do not consider that the treatment with the gum catheter *is* the most speedy in *all* cases. Nay, there is a class of cases in which the gum catheter is of no more effect than any other instrument *which cannot* be *introduced.* In the three cases stated above, where a cure is the result of a destruction of the parts, it may be an expeditious method; but even in those, the metallic sound or catheter is far better, and more certain. In the second case, or that in which the "stricture is grisly and cartilaginous," it is notoriously a very uncertain instrument as far as a cure is concerned. So much so, that cases go on daily, in spite of all attempts at dilation with the gum catheter, until the passage in portions of its course is well nigh and even entirely obliterated. In both these cases, *we* should be disposed, particularly in the latter, to counsel very different treatment. But we must proceed with the treatment.

The objects to be attained by the forcible entry of a bougie or sound or fluid, are, according to the best authorities: 1st. A free passage, at least temporarily, for the urine. 2d. Such an amount of dilatation as will relieve the patient from the immediate effects of the stricture. 3d. Ulceration of the strictured part, which will result in the destruction of the morbid deposit, and in this way leave the passage clear. 4th. It is supposed that dilatation, carried to a certain extent, will, without producing ulceration, induce such an action in the parts as will result in their absorption; and in this way cure the disease. Precise directions are given as to the amount of pressure, and time of its continuance, necessary to the accomplishment of these objects, without producing the much dreaded and really to be feared, artificial passage, with all its terrible consequences. The materials used for these purposes are, 1st. Wax or plaster cloth bougies. 2d. Gum elastic do. 3d. Catgut or gelatinous bougies; these of course for the smaller strictures. 4th. Bougies made of the bark of the American elm. 5th. Bougies of ivory softened. 6th. Metallic bougies either flexible or inflexible. 7th. Water or some other bland fluid *forcibly* injected, so as to induce an expansion of the stricture.

With respect to the first object to be obtained by the use of these instruments—we prefer decidedly the metallic inflexible sounds, or catheters, and next to these the wax bougies.

The second object may in our opinion be better and more certainly obtained, by well polished metallic instruments, *always* used with the greatest care, and in most cases *adding very* little more force than the weight of the instrument itself. We prefer introducing the instrument in the old way, viz. with its convex side upwards until the point reaches the curve, then *gradually* performing a semi-circular curve, without, however, allowing the instrument to stop in its course. The cito, in judicious hands, is the most likely to be the tuto and jucunde, in this neat little operation. Next to the metallic, the wax bougie armed with a good stilet, bent to the proper curve. Experience, however, proves that the relief is but temporary, in a great majority of the cases treated in this way.

The third object to be obtained, viz. ulceration, or such an amount of irritation as will induce a discharge, is recommended by Dr. Hunter, and many of the best surgeons up to the present day. The instrument is to be carefully introduced to the stricture and the extremity allowed to come in contact with the indurated parts. Gradual but firm pressure is to be applied for from five minutes to fifteen or twenty, and this to be repeated from day to day until the stricture begins to yield, and the instrument makes progress in the canal. Very great caution is necessary, in adjusting the instrument and applying the requisite degree of force. It is in this practice, that so many false passages are made—even through the substances of the prostate gland. Our view of this mode of treatment, in the cases where it is generally recommended, is that it is *bad* practice, and should not be resorted to in the present day. It appears to us to be altogether behind the age. The invention of the wax bougie and catheter was a great improvement in the days of Hunter and Pott, and certainly some improvements have been added since. These rough and uncouth processes should be placed along with many others, which have been entirely abandoned in modern days.

The fourth object, namely, the production of such an action in the parts as will induce absorption without ulceration, is too uncertain, except in the three cases mentioned, to be relied upon in a disease of so serious a character as permanent stricture.

One word in reference to the *forced* injections of fluids as a means of dilatation, and we have finished this part of our subject. A good epitome of the matter is given by Velpeau in the following words: "Trye, qui en a parlé le premier en 1784, dit en avoir retiré les plus grands avantages, et Sœmering avance que si le plus fine bougie ne peut pas franchir le rétrécissement, il injecte de l'huile dans le canal, dont il ferme aussitôt l'orifice, et qu'il presse ensuite d'avant en arrière pour faire marcher le

liquide. La mèthode de Bruninghausen est un peu differente : au moment où le malade veut uriner, il comprime l'urètre avec force derrière le gland, force le fluide à rétrograder, et croit détruire ainsi le retrécissement. En 1822 M. Despiney de Bourg a proposé un liquide purement émollient, poussé avec une seringue. M. Citadini qui a publié un travail sur ce sujet, conduit une sonde ouverte jusqu'à l'obstacle, tient l'urètre solidement appliqué sur elle, et s'en sert comme d'un siphon pour injecter avec toute la force nécessaire de l'eau tiède, ou tout autre liquide approprié, dans le canal. M. Amussat, qui s'est cru l'inventeur des injections forcées, se comporte a peu près comme M. Citadini. It veut qu'on applique une compresse autour de la verge, pour qu'il ne reste aucun vide entre la sonde et les parois du canal, puis qu'on adapte une bouteille de caoutchouc remplie d'eau au pavillon de cette sonde, et qu'on pousse l'injection en comprimant la poche élastique avec un tourniquet : mais on sent bien que, le prìncipe étant posé, il importe peu que le liquide soit projete par l'intermède d'une seringue, d'une soche en gomme élastique, du doigt, ou de tout autre manière."

The application of caustic to strictures was practised by Dr. Hunter, and has maintained its position in surgical practice ever since. Hunter's plan of application, was a very simple one. The end of a bougie was removed; the caustic (nitrate of silver) introduced, fastened with a piece of wax; and, the distance to the stricture having been previously measured, the caustic bougie was carefully and quickly introduced, and maintained for a moment in contact with the obstruction. This was repeated from time to time, as the case demanded, or the parts would permit; until a moderate sized instrument could be introduced. Various *portes caustiques* have been invented, for the purpose of more effectually applying this medicament. That of Ducamp was designed to enter the stricture and canterize from within outwards. The instrument of Lallemand was designed to pass the stricture and after projecting the caustic from a lateral opening in the silver catheter, the instrument was withdrawn, and, thus made to act upon the stricture, from *behind forwards.* These two processes and their modifications necessarily involve the passage of the strictured part. The treatment by caustic has found favour among the English and American surgeons, particularly the former. The French, however, as is common where the practice is popular on the other side of the channel, have never heartily adopted cauterization as a means of curing stricture. Sir E. Home, Sir A. Cooper, Sir B. Brodie, and a host of other distinguished British and continental surgeons have given their testimony in opposition to the use of caustic in stricture. It is probable that when it is at all proper, the simple plan of Hunter

as improved by Sir E. Home, will be found the most effectual as well as most practical. Sir B. Brodie gives his objections to the use of caustic for the following reasons.

1st. Although the caustic often relieves spasm, it also very often induces it. It is true that in many instances it enables a patient to make water with more facility; but in many instances, also, *it brings on retention of urine.* 2dly. Hæmorrhage is a more frequent consequence of the use of the caustic, than the common bougie, and it sometimes takes place to a very great and to an almost dangerous extent. 3dly. Where there is a disposition to rigor, the application of caustic induces rigors where there had been no manifest disposition to them previously. 4thly. Unless used with caution, the application of caustic may induce inflammation of the parts situated behind the stricture, terminating in the formation of abscess. There are strong arguments against its use, and yet this practice, next to dilatation, is the most generally adopted of any. No writer of eminence speaks upon the subject, however, without shedding some crocodile tears over the bad effects of caustic and dilatating instruments.

Scarification consists in light incisions made from within the stricture either outwards the instrument having perforated the strictured space, or from behind forwards, by means of a lancet which is made to project from the side of the catheter which contains it and has been introduced beyond the stricture. By pressing upon the stilet projecting beyond the proximal extremity of the *inflexible* catheter, the lancet is made to rise above the surface of the instrument, through a slit—either one side or the other—sometimes on the lower side, when the whole instrument is withdrawn beyond the stricture. In this way, the sharp edge of the blade, comes in contact with the strictured or *any other* part.

"Three instruments have been devised by Amussat, the peculiarity of which consists in their cutting upon a sliding oval button which is made to *hook behind the stricture.* 1. One which is called an urethratome, consisting of a conical steel cylinder a little more than half an inch long, armed with eight longitudinal cutting crests, projecting to the extent of a quarter of a line from the surface. This is carried down upon a mandrin, previously passed through the stricture, and the incision made from before backwards. 2. One called a bridle-cutter, (coupe-bride) resembling the exploring sound of the same surgeon. 3. One more complicated than the other two, consisting of a canula, cleft laterally for about half an inch at its anterior extremity for a sliding semicircular blade, and notched upon the opposite side to the depth of a quarter of an inch, to accommodate the rod which moves the little bar at the end. The instrument with the knife concealed, is carried down to the narrowed part. The oval bar is first pushed on with the rod, and then retracted, so

as to hitch against the bridle. A turn is then given to the canula, in order to bring the knife on the same side with the fold, which is to be divided by pressing the blade from before backwards against the bar." Some twenty cases are reported as treated by an instrument similar to this, by Dr. Victor Ivänchich, of Vienna, who has written a learned and practical essay on the subject of strictures, which was published in 1846. It will be seen that all these instruments pre-suppose the stricture *passable.* They are therefore useless in the impassable form of the disease. Even in the ordinary and most common forms of the disease the orifice of the stricture is found on one side or the other, whereas these instruments are designed to pass through a *central* opening. Mercier, in his remarks on the anatomy, pathology and therapeutics of strictures of the urethra, published in the Gazette Medicale of April 5, 1845, has the following words on this subject: "L' orifice du retrécissement quelquefois central se trouve ordinairement plus prés d'un côté que de l'autre, et particulièrement de la parte superieure, à en juger par les empreintes qu' ont fait dessiner Ducamp et M. Segalas. On conçait qui cette paroi, qui est adhérente au corps du pénis obeisse moins qui l'inferieure qui est libre à la force centripète qui opère le retrécissement; mais jè crois aussi avoir remarqué que l'altèration de tissu existe plus souvent et à un degré plus avancé sur la partie inferieure." The difficulties which accompany the use of these comparatively modern instruments for cutting the stricture, have driven surgeons to the old practice of dilatation; caustic, for the most part, as we have seen, having been proscribed by the most distinguished surgeons. Velpeau, as is usual with him when prejudiced against any practice, uses the following strong and emphatic language against cutting strictures: "C'est donc une méthode que ne pourrait convenir qu' aux brides, aux reserrements valvulaires ou en demi-lune, aux nodosités fibreuses, et qui, hors de là, ne peut guère être tentée que par des gens irréfléchis denués de connaissance précise soit en anatomié soit en chirurgie, ou par des specialistes." He then proceeds to state the instruments used, and begins with that of Dorner, who, Ivánchich says, "hat eine Röhre angegeben, durch welche ein stilet mit einer Lansettspitte," &c. He then speaks of Dr. Physick's, which was an instrument "from which a lancet *cutting on its lower edge,* could, by means of a stilet, be projected from the entering end."*

The ingenious instrument of Dr. Chew, made in this city by Mr. Schively, in 1828, consists of an ordinary silver sound, either straight or curved, and split at the entering end, so that an elliptical double edged knife can be projected, for a few lines, by pushing on a button which is attached to the stilet of the instrument. The point of the

* Pancoast's Operative Surgery.

knife is blunt and pierced for the passage of a silver wire. This wire, like that of Amussat and others, is the leader of the knife, and *must* pass the stricture ere the incision can be made—a sad defect, as may be seen by the remarks above on the position of the orifice of the stricture. Yet Prof. Pancoast says: "The probe head of the wire is gradually pushed on separately *through the stricture, which it readily passes* on account of the central position it necessarily occupies in the canal." Whether this "central position" refers to the stilet or the canal, it is equally fatal to the conclusion, for it is known that the orifice is *generally* on one side of the canal. The blunt extremity is also an objection; a free incision cannot be made. Dr. Physick's is objectionable, because it cuts only one side, and that downwards.

Malgaigne, in his Medicine Operatoire, page 668, remarks that, "Les scarifications (ou incisions internes) offrirent sans doute un grand avantage pour la dilatation au canal. Mais aucun des instruments ne nous parait assèz sûr dans son action. Il nous parait qu'au scarificateur pour remplir le but, doit, 1, agir sur tout l'étendue de l'obstacle, et ne pas aller au-delá; 2, agir par incisions longitudinales; 3, inciser de la base du rétricssement á sonborde libre, pour être sûr de le deviser en entier."

This cannot be done by any of the above instruments; hence, we believe, the want of confidence which the profession has manifested in them. The accompanying cut represents an instrument which we have used with complete success, in the cartilaginous and impermeable form of stricture; in some cases when the popular mode of dilatation had entirely failed—and in fact (which we believe is generally the case in this form of stricture) had only increased the deposit, by keeping up the irritation from time to time, in the urethra. We cannot understand, in fact, how dilatation in this form of stricture, can ever effect a permanent cure. It must produce merely a temporary expansion of the parts, unless it establishes ulceration, which of course would tend to destroy both stricture and urethra.

The objections to cutting, offered by Velpeau, that the incisions will heal by the first intention, we think cannot hold, especially if the stricture be completely divided. The urine will certainly act as a foreign and irritating body, and prevent the adhesion of the parts; and we have found it so in practice after the use of the above instrument. We have not found that incision is a mere prelude to

more complete dilatation, but would strenuously recommend that no dilatation be resorted to after incision; except merely the introduction, now and then, of a common sized silver sound, as a means of precaution only. To attempt to dilate, in our opinion, would be to bring on additional irritation; and thereby tend to establish the stricture again. The stricture deposit is no doubt kept up by the continual or occasional pressure on the part from within, by instruments, or from without, by the action of the muscles.

The cut represents a flexible catheter,* with a slit in the distal end, perpendicular to the instrument, some two and a half lines long. A ring which is thick and strong, is attached to the proximal extremity. The stilet is two lines in thickness, with a button bur, on one end, which moves on a screw thread, to the extent of a quarter of an inch, and may be in this way moved backwards or forwards so as to control the extent to which the stilet is projected into the catheter. The other end of the stilet, has inserted into it a small blade, projecting three lines beyond the point of the stilet and the extremity of the catheter, which is the shape of the pointed thumb lancet, presenting a sharp edge, cutting *both* ways, upward and downward. The diameter is nearly the diameter of the catheter. The extent, forwards, to which the incision will extend, depends upon the position of the button on the other extremity. Three lines is the extent to which it may be pushed forwards. On account of the flexibility of both stilet and catheter, the instrument is equally adapted to the straight portion of canal as to the curved. Dr. Physick, it will be remembered, used two instruments, one for the straight, and the other for the curved portion of the urethra.

The following case will illustrate the practice with this instrument.

Mr. S. a gentleman about thirty-three years of age, applied to me for advice for a stricture which had been growing about nine years. It had originated in a most violent attack of gonorrhœa while at sea. Shortly after the cure of the gonorrhœa which was a long time in progress, a slight dificulty in urination was perceived about five and a half inches from the mouth of the urethra. This gradually increased, until, about five years ago, it became necessary to apply for medical assistance. Relief was obtained by the introduction of wax bougies and catheters, in the usual manner. The stricture, however, continued to increase, and defied all attempts on the part of several intelligent surgeons at permanent dilatation. So much had it contracted, that there was danger of a total stoppage, which had in fact frequently taken place for hours at a time, subjecting him to great danger of rupture of the bladder or urethra, and the usual results, fistulæ in perineo. When he applied to me he was totally unable to introduce any instrument, however small, as he had

*The size of the instrument is reduced two-thirds, in the drawing.

been in the habit of doing, for the purpose of relieving himself. No attempt on my part was successful in introducing an instrument into the bladder, or through any portion of the stricture, which commenced five and three eighths inches from the orifice of the urethra. In addition to this, being of a highly nervous temperament, the mere attempt at the introduction of an instrument, produced at first, fainting. Spasm of the parts also took place on the least irritation. His general health, in other respects, was good. The sexual function, he informed me, was languid, and the effort at coition ineffectual—the semen passing off some time after the orgasm guttatim; he has been married to a healthy and well formed lady for four years. She has had no children, and has not conceived.

After reflecting upon his case, I began to think that some means should be devised to divide at once this thickened and hardened stricture; for it could be easily felt through the perineum, in the form of a round hard body. I called upon our best surgical instrument makers, but found that they had no instruments for cutting strictures, as they were not used by the profession. After some consultation with Mr. Schively, I got him to finish me the one represented in the cut. With this instrument, on the 9th of September, after measuring the distance of the stricture, oiling my instrument, &c., I cut the stricture. The patient was seated in a chair, the instrument, with the lancet retracted, passed down to the obstruction; was held in the right hand with the index finger upon the top of the burr; the index and other fingers of the left hand were pressed upon the perineum, and served to guide the point of the instrument. When it was properly adjusted, so as to cut in the axis of the urethra, the burr was thoroughly pressed upon by the thumb of the right hand, and made to descend to the end of the catheter, the blade of course projecting its whole extent. The patient did not move a muscle of his face, and after partially withdrawing it, the second incision was made, without pain. The stilet was then retracted, and the whole instrument withdrawn, when, on introducing a gum catheter, it was found that it would pass half an inch further. To be sure of producing no mischief, I directed the patient to call the next day at the same hour.

10th. The patient had suffered no inconvenience from the incision, only one or two drops of blood had passed. In introducing the instrument it could be distinctly felt to pass the hard walls of yesterday's cut, requiring a very little more pressure than the other part. Two incisions were made as before, and a gain was made of nearly three fourths of an inch, making the improvement one and three fourth inches. The pain on cutting was rather more to-day than yesterday, but not enough to induce the patient to move the muscles of his face. Several drops of blood passed after the instrument. The stream of urine is rather better.

11th. One incision to-day with more than half an inch advance; rather more blood than yesterday, but very little pain. Suffers no pain in the interim between the operations. The stream of urine improves daily; very slight smarting after each incision.

13th. The fourth incision was made to-day in the same manner, with the improvement of *introducing* a small catheter into the bladder, the first for two years!! In the passage of this instrument, which was allowed to remain a short time in the canal, it was evident that the difficulty was not yet overcome. The catheter came out of a spiral form, and bent with the point upwards.

The stream of urine improved. More pain during this operation (cutting) than previously, but less blood.

14th. Prepared to use the Letheon, expecting to experience much pain, but on trying the metallic sound I found it would pass very easily, and a voluntary attempt at urinating produced a very good stream. I recommended him to wait a few days to see whether the relief would be permanent. He returned on the 16th, when I found that the sound which had passed so easily before, would not now pass. Some obstruction near the neck of the bladder, though the urine passed very well. I directed him to call on the next day, when I would try a silver catheter.

17th. Neither the sound or silver catheter will pass the obstruction. The parts cut are easily passed, but there seems some impediment still. Operated for the fifth time, by simple incision, when on withdrawing the instrument, I *dropped* the silver catheter into the bladder. About half a drachm of blood followed this incision, and it was more painful than the others, but the passage is apparently complete, and permanently opened. The patient continued to call upon me every few days, and informed me that the silver catheter continued to drop into the bladder. The urine passed as free as ever it had, and not an unpleasant symptom had followed. I directed the occasional use of the silver catheter as a precautionary measure, but I believe it is of no further use. The cure remains complete up to the publishing of this article.

The incisions from without, which are the next form of incisions to be considered, can scarcely, we think, with the exception of *some* cases of fistulæ in perineo, be necessary. The plan of Sir B. Brodie, in his case, in which he operated with a modification of Mr. Strafford's instrument, and in which he *first made an external incision for the purpose of guiding more surely the instrument*, is one which, to say the least of it, as far as the stricture was concerned, was entirely unnecessary. The plan of cutting down upon a sound, and opening the urethra by projecting a trocar-pointed perforator, towards the external orifice of the urethra, is one that is proper in very bad cases of closure of this canal, complicated with one or more fistulæ.

It does not enter into our present plan to speak of the causes and treatment of fistula in perineo, as connected with stricture. We would merely state in conclusion, that our remarks resolve themselves into the following heads.

1stly. That stricture may exist in one of these forms.—Simple, as the result of recent or present inflammation in the part, producing a contraction of the part.—Confirmed, or that in which a deposit of some kind has taken place outside of the lining membrane of the urethra, so as to infringe upon the diameter of the canal. The most persistent, and formerly considered the most incurable of these forms, being that in which the deposit is cartilaginous. —Any one of the above forms may be complicated, and frequently is, with spasmodic stricture, which latter may also exist.—Without any permanent deposit.

2dly. That it is a disease, when found in the permanent form, seldom entirely cured by the ordinary means.

3dly. Some three forms of the permanent stricture may be relieved, and sometimes cured by rupture and dilatation.

4thly. That the more persistent forms of the disease had better be *cut*, whether combined with spasmodic action or not.

5thly. That the merely spasmodic form must be treated 'according to circumstances.'

BIBLIOGRAPHICAL NOTICES.

On the Causes and Treatment of Abortion and Sterility; being the result of an extended inquiry into the Physiological and Morbid conditions of the Uterus, &c., &c. By James Whitehead, F. R. C. S. Surgeon to the Manchester and Salford Lying-in Hospital. London, 1847.

Diseases of the Uterus have, of late years, engaged the attention of British and American practitioners in no inconsiderable degree; and we think justly. In the economy of the female, so important a rôle does the uterus play, that every thing relating to its diseased conditions cannot but be regarded as of very great importance. Hence the number of treatises which,

of late years, have appeared on this subject from the British press, not to speak of the translations from the French.

We well recollect the severe, if not abusive article, which appeared some nine or ten years since in a highly respectable British journal, against Balbirney, on the use of the speculum in uterine diseases. A great change, however, since that period is manifested in British practitioners and authors. Perhaps not a single book comes to us now from that country that does not speak of the speculum and its use as one of the legitimate means of the physician for forming his diagnosis. We are glad of all this. It shows an improved state of the medical mind; it affords proof that no means are to be discarded for accurately ascertaining the condition of any suffering organ; and we feel warranted in saying that, but for the speculum, no man could practice judiciously and properly in diseases of the vagina and uterus.

The above work contains 426 pages. Of these, 180 are upon the subject of menstruation; 159 upon the signs of pregnancy; 160 upon the causes of abortion, and the remaining 27 upon sterility.

Of the chapters upon menstruation and signs of pregnancy, it has not been our good fortune to see exactly the reason of publication; certainly not for occupying more than one-half of the volume. This part could have been omitted, we think, without detriment to the remaining portion of the work, though it would certainly have diminished the size of the volume. Still, these chapters are not without interest, and will bear reading.

In speaking of the function of the Ovaries, the researches of Lee, Bischoff and Raciborski, and others, are mentioned; but we find no mention of Pouchet of Rouen. This eminent physiologist, as long ago as 1835, taught the positive theory of the fecundation of the mammifera. His views, since published, are summed up in ten fundamental physiological laws and three accessory. Raciborski and Bischoff's subsequent labours are but confirmations of Pouchet's laws.

Spurious Menstruation—Pseudo-Pregnancy.

Three cases are given, together with the constitutional signs of this condition of the uterus. In all three, disease of the organ existed; and the author lays down the rule that it is invariably

associated with a morbid state of parts situated external to the uterine cavity, generally of its cervix and labia, sometimes of a portion of the vaginal mucous membrane.

Suppressed Menstruation.

A few interesting cases under this head are given—at the close of one of them, in which severe hysteric symptoms were present, and which terminated fatally, the author remarks:

"Hysteric affections are generally said by writers to be unattended with danger. Speaking of this form of disease, a modern author (Watson) says: 'It is a dreadful announcement to have to make to a father or mother that their child is epileptic, whereas hysteria, though it is sufficiently distressing, is attended in nine hundred and ninety-nine cases out of a thousand, with no ultimate peril to body or mind.' On the contrary, my belief is, that a greater amount of irreparable mischief has its origin in this class of affections in the adult female, than in derangement of any other system of organs, not excepting those of digestion and assimilation."

We are not sure that this is not a little too broadly stated; nevertheless, we feel confident that, at the commencement of menstruation, and for some years afterwards, hysteric affections are not to be regarded as of no moment, especially if, while the catamenia become obstructed from any cause, hysteric symptoms manifest themselves, the patient is in danger; for menstrual metastasis to the brain and spinal marrow may ensue, a condition of things almost always fatal.

Chapter 4th.—*On the last Menstrual Crisis.*—Endo-uteritis the author considers as one of the diseases liable to affect women at this period; but it is also found at other periods of life, and is not unfrequently the cause of dysmenorrhœa.

By Endo-uteritis, we are to understand an inflammation of the lining membrane of the uterus in part, or entire.

"In cases of endo-uteritis the body of the uterus is somewhat enlarged and painful under pressure of the finger; the cervix is slightly hypertrophied, but not so painful as the upper part of the organ, and it is generally free from abrasion. The only evidence of the existence of the disease capable of being revealed by the speculum, is the presence of the bright red ring surrounding the verge of the os uteri, together with the escape therefrom of the

characteristic fluid product, or of a small quantity of blood, which, by becoming incorporated with the vaginal mucous in its transit outwards, appears at the os externum in the form of sanies."

"The constitutional symptoms are, rigors and febrile excitation, which varies in intensity according to the severity of the local inflammation, or the peculiar constitutional susceptibility of the individual; lassitude; sense of fulness; weight and tenderness of hypogastrium; fixed pain in the inguinal region, occupying one or both sides; disordered digestion; irritable bladder; spinal irritation and convulsive affections."

Treatment of this affection. Leeches to the *hypogastrium*, or over the upper part of the sacrum; the exhibition of remedies to subdue the febrile action. When all febrile excitement is subdued, a more tonic plan should be pursued. Considerable benefit may be derived from injecting within the uterus, a weak solution of nitrate of silver in combination with ext. conii.

"R. Argent. Nitrat. gr. vj.
Ext. Conii ʒj.
Aq. destill. ℥j
Misce fiat injectio."

Or by the introduction of an ointment of the same material.

"R. Argent. Nitrat. gr. x.
Unguent Cetacei ʒss.
Liquoris Plumbi ʒss.
Misce, fiat Unguent."

"The latter form is applied by means of a small piece of lint fixed upon the end of a long probe, and fastened to the handle of the iustrument with a thread, with a view of securing its safe withdrawal. Not only does no disturbance or discomfort of any kind ensue upon the employment of these local measures, but, on the contrary, a beneficial change is often evident after the first application; and I have witnessed the suspension of pain to be instantaneous. The operation of injection is done with the aid of the speculum, by means of a long syringe, similar to Clarke's female syringe, having a nearly straight tube, with but one hole at its extremity. If carefully managed, from one to two drams of the remedy (which may be composed of different materials, varied in form and strength according to circumstances) will pass within the organ at each operation, most of which returns almost immediately. The temperature of the fluid, previous to being used, should be raised to 90° F."

We confess we have read this mode of treatment with some misgivings. We have never as yet even ventured to inject fluid into the body of the uterus. It may be unnecessary caution on our part; still we have never done it, lest an inflammation should be set up which might baffle all remedial means.

We should certainly think the saving clause, "when all febrile excitement has become completely subdued," ought to be rigidly adhered to.

Chapter 5. *Signs of Pregnancy.* We pass over this chapter and come to

Chapters 7, 8, 9. *On the Causes of Abortion.*—These are the most interesting chapters in the book.

Two general causes; 1, disease of the cervix uteri; and 2, a venereal taint, are by far the most influential causes in the production of abortion.

Out of 378 cases examined carefully, 275 arose from diseases of the lower part of the uterus. What are these diseases? The author enumerates them as follows: 1. Inflammation, and superficial erosion of the cervix. 2. Varicose ulcer. 3. Œdema of the cervix. 4. Fissurated ulcer of the cervix. 5. Endo-uteritis. 6. Follicular ulceration.

To our mind the importance of attending to diseases of the cervix, in cases of abortion, cannot be too highly valued. Any one who will run his eye over the works on midwifery and the journals of the day, will perceive how inadequate are the means proposed to overcome abortion in an individual liable to abort. Rest, opiate injections, separation a thoro, all aid in certain cases; but most assuredly in many they fail.

Convinced, as we now are, of the frequency of diseased os and cervix uteri in recurring abortion in the same individual, we always call in the aid of the speculum. We have known, in more than one instance, a pregnant woman to be afflicted with what was termed a flooding, for months; abortion has followed; and on examination afterwards we have found a highly irritable state of all the parts, even extending to the bladder; a red, ugly looking ulcer, extending into the os itself, and oozing out from it a bloody fluid.

In all the forms of ulceration, escharotics to the ulcerated

surface are indispensably necessary, and, for the most part, an alterative course of mercury and sarsaparilla.

The author prefers leeching to the hypogastrium. We prefer leeches applied directly to the os uteri, and occasionally scarifications with a *sharp* scarificator, attached to a long handle.

The French practice of applying a hot iron to the part is not so painful as might be supposed, if done with tact and delicately; in some obstinate cases of ulceration it is a valuable agent, more terrible in appearance than in reality.

The author lays down the three following positions from the cases narrated in these chapters on abortion.

1. That what is commonly called ulceration of the cervix uteri may be the predisposing, as well as the immediately exciting cause of abortion.

2. That the purulent product of uterine ulceration, under some forms, at least, possesses virulent properties, capable of producing disease in another individual, or in another part of the same individual, by inoculation; and probably capable also, by being absorbed into the circulation of the same person, of materially disordering the fluids, and of creating thereby a peculiar susceptibility to disease.

3. That the application of caustics to the uterus, and the employment of other active measures which I have heard practitioners object to during pregnancy, as likely to endanger the well-being of the offspring, may not only be safely administered, but that they constitute in fact one of the principal means of securing both mother and child from danger.

Several cases are narrated of varicose ulcer of the cervix, and the appropriate treatment given. We have not room for more than the three points which the author lays down, and which, if proved by experience hereafter to be true, will clear up some heretofore anomalous cases of what is termed menstruation during pregnancy.

1. That menstruation during pregnancy is, for the most part, perhaps always, associated with an abnormal condition, generally with ulcerative disease of the uterus, requiring at all times active remedial treatment.

2. That hæmorrhage during pregnancy is not necessarily associated with an altered relation of the parts within the uterus,

and, by timely care, need not interfere with the integrity of the ovum.

3. That menstruation, during the early periods of lactation, is not always natural menstruation, but that it is generally associated with morbid conditions which are amply adequate to the satisfactory explanation of the phenomenon; that secondary hæmorrhage is, in the majority of instances, not owing to imperfect contraction, or atomy of the uterine fibres; and that the discharge very probably proceeds, under these circumstances, not from the inner surface of the uterus, but from the diseased surfaces situated upon parts external to the cavity of the organ.

Syphilis as a cause of Abortion.

The author confesses that when he commenced his investigations on the subject of abortion, he had no idea that syphilis was so common a cause as he afterwards was induced to believe it to be.

He thinks, and, we doubt not, justly, that the notion entertained of late by some that syphilis can be radically cured without the aid of mercury, is the cause of many disastrous consequences. Individuals have supposed themselves rid of this fearful disease, when, in fact, it was only covered over, as it were; subsequently they have married, and consequences most unhappy have followed. All practitioners in large cities must have seen examples of this kind. Mercury is to syphilis, what quinine is to ague. Without its use, in genuine syphilis, we do not think an individual safe.

The local pathognomonic signs of the uterus in a venereal taint are,

1. Endo-cervicitis, or inflammation of the lining membrane of the cervix uteri.
2. A mottled or patchy appearance of the cervix.
3. Apthæ of the cervix.
4. Warts on the cervix or walls of the vagina.

The author, as one of the remedial means, highly extols the Rumex Hydrolapathum. "I have used it for several years extensively, both in public and private practice, with the most gratifying results, in cases where sarsaparilla had been given in

large doses for many months together, without the slightest benefit."

Of Prolapsus Uteri it is said: "That prolapsus uteri can be effectually treated, and the position of the organ permanently restored, without the aid of the pessary, there exists not a doubt on my mind!" Would that this could be proved experimentally true! How much trouble, vexation, and disappointment at last, in this very affection, have not the fairest of our race suffered!

So far as our observation goes it confirms the following statement:

"The cases (prolapsus uteri) are generally accompanied with leucorrhœa, and with inflammation or ulceration of the cervix uteri, evidences of which are found in almost all instances to have prevailed at a period anterior to the occurrence of the displacement."

The treatment is to be directed locally to the diseased cervix, and generally to the constitution.

Of the first, nit. argent., or other suitable remedies; medicated tents are to be applied to the os, by means of a tube, and changed every one or two days. The metallic preparations should be used not oftener than every third or fourth day, vegetable applications, as matico, tannin, &c., being adopted intermediately.

Of the second, when all febrile excitement is absent, quinine, metallic oxides, iodine, iron combined with cinchona extract or taraxacum, gentian, &c.

Chapter 10. *Sterility.* It is true, as the author observes, that the cause of sterility is generally attributed to a faulty condition of the female organs. No doubt correctly. When we consider the complicated female genital apparatus, the chances are certainly vastly in favour of the faulty condition of this, as compared with that of the male.

The author, however, in this work proposes merely to treat of those cases of sterility, which result from a morbid state of the uterus, originally of a normal condition.

Three principal causes are mentioned, viz: 1. Endo-uteritis; 2. Spyhilis; and 3. Ulceration of the cervix.

The means employed in the treatment of the first and third, are such as have been already given—viz: local applications to the

diseased surfaces, and constitutional treatment of an alterative and tonic character, as iodide of iron and sarsaparilla.

In some cases, according to Mr. Whitehead, the uterus has resumed its natural function, after an appropriate course of treatment; leading to the hope that as our knowledge advances we may be more and more enabled to overcome this abnormal state of the uterine function, the cause often of much unhappiness.

We trust that the views expressed by the author of this work, especially on the subject of abortion, will be more generally entertained and carried out in daily practice. We feel confident that if they do become more generally understood, and practised upon, much suffering and danger will be obviated, and relief and comparative health afforded to those who otherwise may be doomed to drag out a miserable existence. †

The American Medical Almanac, for 1848, *containing statistics of the various Medical Colleges, Hospitals, Dispensaries, etc., of the United States; together with other information of value to the Physician and Student.* 18mo. pp. 224. Lindsay & Blakiston, Philadelphia.

The title page of this publication indicates very truly the character of its contents. Beside the account of Colleges, Hospitals, Dispensaries, private associations for granting instruction on the various branches of Medical Science, the work contains the organization of the National Medical Association; the code of ethics adopted by the late National Medical Convention; a chapter on Poisons, their antidotes, and the treatment proper in cases in which the various poisons have been taken; several articles on the inhalation of ether; Dr. Burder's letters on the importance of promoting the religious welfare of patients, and various miscellaneous articles of general interest to medical men, making altogether an exceedingly interesting and useful volume.

THE MEDICAL EXAMINER.

PHILADELPHIA, DECEMBER, 1847.

BRITISH AND FOREIGN MEDICAL REVIEW.

The October number of this admirable Review announces that it is the last which we are to receive. It is melancholy for us to state, that its discontinuance is owing to its never having received such a patronage from the profession as to authorize its distinguished editor to continue it. Still he persevered in his useful exertions until prudence compelled him to abandon the undertaking, and to permit it to pass into other hands, under another form. We have watched this Journal from its inception to its termination. Not a number has escaped our attention; and not a number has been issued that has not afforded us valuable instruction. We are amongst those, who daily feel, more and more, how much we have still to learn, and who mourn over our limited knowledge,—albeit there is no want of effort to maintain ourselves *à portée* with the existing state of science. Doubtless, happy, thrice happy, are they who can admit that "ignorance is bliss;" but this privilege has been denied to those who feel irresistibly, that their life must be spent in incessant toil to allay that thirst for knowledge, which has been implanted in them by the author of nature. To slake this thirst how effectual have been the pure waters issuing, from time to time, from the fount now about to be closed to them. To the profession at large—and especially to the reading, thinking, studying portion—alas! how few in number! the privation of their accustomed intellectual treat from abroad will be felt like the loss of a cherished friend and counsellor; whilst those who are engaged in the active and important occupation of teaching will deplore that one great source of their information, in regard to the novelties and the niceties of science, is about to be shut out from them. May we not hope that the amalgamation of the British and Foreign Medical Review, with its elder brother—the Medico-Chirurgical—may supply the place of the lost one; and that the 'wonted fires' of each parent may burn more brightly in the progeny.

Of Dr. Forbes—who we regret to find is to have no connection with the new Journal—we take our leave with extreme regret; trust-

ing, however, that we shall have constant occasion to witness the continuation of his valuable services to the profession, of which he is so distinguished an ornament. Highly accomplished as a general and professional scholar: dignified and chaste in his language: forcible and fearless in the expression of his opinions: skilled in the selection of reviewers, who were fully competent to their elevated vocation, he was eminently calculated for the lofty editorial position he maintained for the last eleven or twelve years; and although there may be some who writhe under the stripes which he not always mercifully inflicted—and who may not be disposed to kiss the rod that chastened them—we must confess, that in no instance, in our recollection, have we been able to detect unfairness, or to feel that the lashes, although well laid on, were unmerited.

Taking the British and Foreign Medical Review as a whole, we might be justified in indulging the fear, that we may not readily "look upon its like again," seeing, that at the termination of its career, we can state even more fervently than we have done on former occasions, our own conviction that it is—and ever has been—the very best medical review which has appeared in the English language. May we be able to say as much of the "British and Foreign Medico-Chirurgical Review," when it has passed through a long, and we hope glorious course. Whilst we grieve at the loss of its great progenitor, we shall hail its advent with unmixed pleasure.

ADULTERATION OF DRUGS.

Constantly have we complaints in the journals of sophistications of many of the most important articles and preparations of the materia medica. The evil has now become so crying, that the College of Pharmacy of New York has decided on petitioning Congress to pass a law, authorizing the appointment of an inspection at the Custom House of imported galenicals and chemicals, and the confiscation of such as are not approved of. In this petition the different medical schools will doubtless unite, as the Jefferson Medical College has already done. We may remark, by the way, that we have recently examined a specimen of the *Pilula Hydrargyri*, prepared by steam power at the chemical laboratory of Mr. George W. Carpenter of this city, which may be depended upon as genuine. It is made in the same manner as at Apothecaries' Hall, London, and the mercury is completely extinguished. This is one of the imported articles which has been most frequently found wanting.

MEDICAL CLASSES IN PHILADELPHIA.

A month has now elapsed since the lectures commenced in the Medical Schools of Philadelphia, and we are enabled to state that at no former period has the number of students in attendance been greater. Precisely how many are in the city, until the catalogues appear, it is impossible to tell; we have heard the number variously estimated, from a thousand to twelve hundred. Eleven hundred, probably, is not far from correct.

THE ASIATIC CHOLERA.

The foreign journals continue to furnish the unwelcome intelligence of the march of this pestilence in its old track. At Trebizonde, it appeared on the 9th of September, and continued to increase until the 15th, when the attacks became less numerous, and on the 18th the disease appeared to be on the decline. There had been 300 cases, of which 103 proved fatal. The government medical officer at Trebizonde has remarked that the disease is not so violent as that which formerly devastated Europe, and he adds, that of those who applied to him for advice he saved 90 out of 100. Some cases had been reported in the villages in the neighbourhood of Trebizonde. The disease prevailed both at Bagdad and Imaur-Ali, about the same period, (September.) Late accounts also state that it had appeared at Moscow, and that "Colonel Stalupin, an aid-de-camp of the Emperor of Russia, had fallen a victim to it." The disease had likewise appeared at Odessa. The *Gazette Medicale*, of the 9th of October, informs its readers that "the Cholera has passed the frontiers of Gallicia, and is now spreading through Silesia and Moldavia."

The Dublin Medical Press of the 13th of October, observes: "It is with regret we perceive by announcements in the daily journals that the Asiatic Cholera has reached the interior of Europe, and is gradually extending itself in a north-westerly direction. It is credibly reported that several cases have occurred at Charkav, in south-western Russia, and at Kiev, a large town on the right bank of the Dnieper, and on the frontiers of Poland."

From all the accounts we have seen, it would appear to be certain that the Asiatic Cholera is approaching us by the same route as on the former occasion, and there is great reason to apprehend that it will reach this Continent during the next year. Should such be the case, it is to be hoped that it will not be preceded or accompanied by a similar panic, and that those of the profession who may be obliged to combat it will not desert the established principle of our

art, and the evidences of their own senses, to run after every empirical suggestion that may be put forth by ignorance and credulity. It is furthermore to be hoped, that the opportunity will not be allowed to pass, as before, without suitable efforts to establish the pathology of the disease. Chemistry and the miscroscope should be diligently invoked, to reveal the condition of both the solids and the fluids, including all the secretions.

NEW YORK ANNALIST.

We regret to find that our well-intended compliment to our brother of the Annalist, on the entrance of his journal upon its *second year*, is deemed by him "*equivocal.*" We assure him that we meant to express no doubtful praise, but unreserved commendation of the zeal and ability displayed in his spirited publication, and a hearty wish for its continued prosperity. A remembrance of the fate of several of his predecessors, and at least one contemporary, in "the Commercial Metropolis," was well calculated to make us rejoice that a better destiny seemed to await him.

RECORD OF MEDICAL SCIENCE.

Health of the City of New Orleans.—We shall continue hereafter, as heretofore, to make a few passing remarks upon the sanitary condition of our city. In our September number, it was stated that the Board of Health had declared the yellow fever to be epidemic. Events which have transpired since that announcement, have fully verified, we regret to say, the assertion of the Board.

The fever made its appearance about the 1st of July, and began to decline, in accordance with the laws of epidemics, about the latter part of September; and by the 1st of October, the deaths daily were about ten. Thus the epidemic, as such, raged about six or seven weeks. It attacked many who had passed unaffected through the season of 1839 and '41; some who had been permanent residents for several years, fell victims to the disease. In some of its features it differed from former epidemics.

We had fewer cases of black vomit; and many who were attacked with this usually fatal symptom, recovered. In many cases, the fever terminated in 24 hours; in others it raged for 56 or 72 hours Nor was the issue of the case materially influenced by the duration of the

fever. Since many in whom the fever continued for three days, recovered as promptly as those in whom it ceased at the end of 24 hours. Throughout the disease, the head-symptoms were striking and obstinate; and many, very many, succumbed with all the symptoms of congestion of brain.

As it is not our object to go into a description of the disease, we shall confine ourselves to the statistics on the subject. After much labor and great care, we have compiled from the published reports of the Board of Health the following statement, which will speak for itself.

Interments in the city of New Orleans, from the 3rd of July, to the 18th October, 1847, inclusive.

For the week ending				10th July.	Total	138,	5	of yellow fever,		
"	"	"	"	17th "	"	143,	6	"	"	
"	"	"	"	24th "	"	131,	16	"	"	
"	"	"	"	31st "	"	177,	47	"	"	
"	"	"	"	8th Aug.	"	263,	118	"	"	
"	"	"	"	15th "	"	353,	197	"	"	
"	"	"	"	22d "	"	443,	322	"	"	
"	"	"	"	29th "	"	461,	328	"	"	
"	"	"	"	5th Sept.	"	540,	435	"	"	
"	"	"	"	12th "	"	491,	355	"	"	
"	"	"	"	19th "	"	257,	169	"	"	
"	"	"	"	26th "	"	181,	85	"	"	
"	"	"	"	3rd Oct.	"	149,	61	"	"	
"	"	"	"	10th "	"	126,	44	"	"	
From the 10th to the				18th "	"	148,	53	"	"	
Total						3990,	2241	of yellow fever.		

Interments in the city of Lafayette, from 26th of July to 21st of September, 1847, inclusive. Total, 793, of which 498 were of yellow fever. Thus making the total of deaths from all diseases during the time specified—in both cities—4,783, of which 2,739 were from yellow fever.

The above table will convey quite a correct idea of the state of health of our population from the 3d of July to the 18th of October, 1847.

From the foregoing table it will appear that the epidemic reached its acme about the 1st of September, and after that date it gradually declined. During the prevalence of the fever, it has been computed that between twenty and twenty-five thousand persons were attacked with the disease; this, however, is more a matter of conjecture than accurate calculation.

On the 18th of October, the Board of Health published the following statement:

Meeting of the Board of Health, October 18th, 1847.

The Board of Health feels authorized to make the announcement that the yellow fever, which has been prevailing for some months as

an *epidemic*, has, for some time, ceased to exhibit this character, and as such has now disappeared. At the same time it is proper to state that the *sporadic* cases, which have always been seen for one or two months after the disappearance of epidemic yellow fever, must still be expected to prevail.

Signed, W. Stone, *Chairman.*

W. T. Brent, *Secretary pro tem.*

As the yellow fever declines, our ordinary autumnal diseases begin to make their appearance. We have now under treatment two cases of typhoid fever in private practice; they are very obstinate, one 17 days standing, and not yet convalescent. Since the commencement of the fall season, the sky has been clear, the air cool and bracing, and but little rain to interrupt out-door business.—*New Orleans Medical and Surgical Journal.*

Magnetized Gold and Tonic Pills.—Human ingenuity is equal to the demands of unsatisfied ignorance in the matter of medicine. On looking over the catalogue of nostrums which have been in repute within half a dozen years, together with those now enjoying a full measure of popularity, it would seem almost impossible to edge a new quack article into an already overstocked New England market. But the ever-craving appetite of that great multitude of unreflecting men and women, who are always ready to swallow down impositions under the potent name of medicine, is scarcely satisfied with the variety offered for their acceptance; and it is a lamentable truth, that the patent medicine disease is extending, and the cunning manufacturers of depopulating compounds are glorying in the success of their thousand and one devices to physic the nation. At this juncture of affairs in the system of wholesale humbuggery, one Gridley, of Southampton, Mass., has marched boldly into the arena with a new pill—the mightiest of all. Already, the lame, the halt and the blind, begin to cry for them, as the proprietor says of the worm lozenges—yes, they will sell, because there is magic in the idea of a *golden pill*. Then they are so perfectly safe, too, that box upon box may be taken with impunity, thus prolonging the pleasure indefinitely. Under the schedule of directions we read that "*An adult may take one of the gold pills after breakfast and another after supper, for fifty days.*" What an obvious improvement over the antiquated plan of a dose once or twice a week! In a circular addressed to physicians, one of which is before us, are the following statements: "The base of the gold pill is chloride of gold, iodine and chlorine, exalted nearly one hundred fold by galvanic forces. They are so powerfully magnetic that they generally quiet the nervous system, and in all susceptible persons, produce more or less inclination to sleep, of the most pleasant and refreshing kind. They excite the organs of generation, are a cure of sterility, arouse the system generally, permanently and safely." This quotation explains the abomination that lurks under the guise of a golden pill. Before condemning the British govern-

ment for winking at the violation of a wholesome, righteous law of China, against the habitual consumption of opium by the people, we had better look into the manner of feeding the ignorant martyrs to imaginary maladies with that seductive drug at home. If morality is not absolutely put to the blush by the insinuation in regard to the specific effects of these "golden pills" on the procreative apparatus, it is enough to make one ashamed of a state of society that tolerates these brazen-faced inroads upon decency.—*Boston Med. & Surg. Jour.*

Voluntary Loss of Muscular Action.—From the Christian Reflector we extract the annexed account of the long disuse of one the limbs of the human body. Many similar facts are on record, illustrative of physical endurance, and of the force of customs based on false views of religious duty:—

"It may seem incredible, but it is undoubtedly true, that there now exists at the Marmandilla Fank, in the middle of the city and island of Bombay, British India, a human being who has inhabited a summer-house, and held, on the palm of his left hand, a heavy flower-pot for twenty-one years without intermission. The narrator of this circumstance actually saw the hermit (for such he is called). The arm is completely sinew bound and shrivelled, the nails of his fingers are nine inches long, and curved like the talons of a bird. His beard nearly reaches to the ground when standing erect.

"While sitting, the man rests his elbow on his knee, and when walking he supports it with the other hand. His countenance indicates intelligence, and he once had very extensive possessions. All he now possesses is a few rags round the middle of his body, and a servant who is allowed to attend to his immediate wants, the pecuniary part of which is supplied by visiters.

"Twenty-one years ago he lost his caste by eating mutton! an indulgence in totally forbidden food, and was consequently condemned to hold, for 30 years, a large flower-pot filled with earth, in which grows a sacred plant. To lose caste, and not be able to take it up again, according to the superstitions of these deluded idolators, is to incur the penalty of everlasting misery in a future state. What an example does this poor deluded creature afford of perseverance, zeal, courage and devotion, worthy even of the highest cause. If he live to redeem his caste, most likely he will hereafter be set apart to be worshipped as a god."—*Ibid.*

Contractions from Burns. By Mr. Bransby Coopfr.—If suppuration take place in a burn, great care must be taken to prevent contractions during and after cicatrization, for both granulations and newly-formed skin have such a tendency to shrink, that all the precautions which can be taken will sometimes prove abortive, and dreadful distortions result.

I cannot agree with Mr. Earle in considering them always as a "source of blame to surgeons," but, on the contrary, believe that they are the effects of a condition of granulations and skin peculiar to

burns, as indeed John Hunter has said:—"The contraction takes place in every point of the granulation, but principally from edge to edge, smaller and smaller, although there is little or no new skin formed, which now even has a similar power, assists the contraction of the granulations, and is generally more considerable than that of the granulations themselves; drawing the mouth of the wound together like a purse." These contractions produce the most frightful scars, and frequently interfere with the functions of important joints. I have often seen the chin drawn down upon the sternum, the lower jaw depressed so as to prevent the closing of the mouth, the saliva constantly flowing over the lips, deglutition obstructed, and all these inconveniences attended with frightful distortions of countenance. Permanent contractions of the limbs frequently result, tying the upper arm to the chest, after burns about the shoulders, so as entirely to prevent the performance of the motions of the upper extremity, rendering it often worse than useless, an actual burthen, and the inconvenience inducing the sufferer to seek any operation, even to the removal of the limb, for the cure of the deformity, rather than remain a permanent cripple. As to the operations proposed, and often performed, for the cure of the deformities arising from burns, I can say but little in their favour; and indeed so unsuccessful have they proved in my own practice, that I feel but little disposed to recommend a patient to submit to the painful dissections which are required for the removal of the cicatrices, and which so rarely afford the relief anticipated. Dupuytren, who does not speak very favourably of the result of operations on cicatrices after burns, recommends that they should never be attempted until months, or even years, after the formation of the cicatrix—not, in fact, until the "frœna and bands had become perfectly organized," when he considers they have no longer any tendency to contract. An objection to this practice appears to me to present itself—viz., that the muscles have probably undergone a change to fit themselves to the new position of the limb; and that even bones themselves, if a joint be implicated in the contraction, may have also so accommodated themselves to the circumstances in which they are placed as to be incapable of being restored to their original position, even could this be effected.

The operation usually proposed for the removal of these deformities is the transverse division of the contracted cicatrices until the parts can be drawn and extended to their natural position, and there be retained by bandages and machinery competent to the purpose. In some cases this cannot be effected at once, but must be attempted by a slow and gradual extension, which should be constantly maintained during the granulating process. When these means are employed, the apparatus should be worn for many months after the wound is healed—indeed, until the new skin has become perfectly organized, or contraction will be certain to recur as soon as the extending force is removed. Should the granulations become too exuberant during the recovery, nitrate of silver should be freely employed to keep them down. Some surgeons have recommended that the whole extent of

the cicatrized skin should be dissected off, and that the parts previously bound down should be restored as nearly as they can be to their natural position, that the edges of the healthy skin should be brought into as close an approximation as possible, and appropriate means employed to promote the healing of the wound. Modifications of this mode of treatment have been adopted by making a longitudinal incision through the healthy skin on each side of the wound, but at some distance from it, so as to enable you to bring the two portions of the skin, thus let loose as it were, in as close contact as possible. Some surgeons have even practised the Taliacotian plan of partially removing a portion of skin from the vicinity of the wound, and thus attempting to restore the burnt surface by applying it over the wound, and to unite it, by what is termed the plastic mode; but even under such circumstances, the contractions have returned with the same inveteracy as under the other modes of treatment.

I believe the great object is to prevent these contractions, during the progress of the healing of the wound, and the position of the patient is the principal preventive means, taking care that the mechanical methods are persevered in until the cicatrix is perfectly organized, and the new skin has lost all its tendency to contraction; but I acknowledge it is very difficult to say when that exact period has arrived.

About three years ago I had placed under my care a child of eight years old, who had been burnt about two years before in the front part of the neck; and in consequence of the contraction of the cicatrix, the head was drawn downwards toward the chest, the lower jaw and lip depressed, and the countenance much disfigured. I made an incision along the base of the lower jaw to the extent of the cicatrix, and dissecting the skin of the lip from the bone, restored it to its natural position. I then dissected off the whole of the cicatrix, divided the sternal attachment of the sterno-cleido mastoideus muscle on one side, and was then able to elevate the head; in which position I secured it by an apparatus, which was made for the purpose, to support the chin, and prevent subsequent retraction. The plan promised complete success for six or eight weeks, when the pressure of the chin upon the instrument, probably from contraction recurring, became so painful that its use was obliged to be discontinued. The result of this was, that, although the patient was relieved to a considerable degree, the deformity returned to a certain extent, and she left London permanently disfigured. One great advantage, however, was gained by this operation—viz., the lips were restored to perfect adaptation, and rendered capable of performing their natural functions. I have also divided cicatrices from burns in the hands producing contractions of the fingers, but with no better success. The protracted period necessary to the cure tires most persons out long before it is completed.—*Med. Gaz.*

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GRADUATES OF JEFFERSON MEDICAL COLLEGE

OF PHILADELPHIA.

March, 1847.

At a Public Commencement held on the 25th of March, 1847, the Degree of Doctor of Medicine was conferred on the following Gentlemen, by the Rev. C. C. Cuyler, D. D., in the absence of the Rev. Ashbel Green, D. D., L.L.D., President of the Institution; after which a Charge to the Graduates was delivered by Professor Dunglison.

Name.	State.	Subject of Thesis.
Addison, Robert K.	New Brunswick.	General Relations of the Organs of the Human Body.
Ashley, William	Georgia.	The Pulse.
Atkinson, Edward C.	Pennsylvania.	Conception.
Baker, Andrew J.	New Hampshire.	Effects of Kindness and Mental Emotions on Health and Disease.
Barber, John E.	Pennsylvania.	Intermittent Fever.
Barclay, Michael W.	Virginia.	Iodine.
Bates, Solomon A.	Virginia.	Cholera Infantum.
Beale, Stephen T.	Pennsylvania.	Caries of the Teeth.
Bell, William S.	Tennessee.	Carcinoma of the Mamma.
Billups, Robert A.	Alabama.	Cutaneous Absorption.
Blackburn, Joseph W.	Pennsylvania.	Bronchocele.
Boone, James	Maryland.	Phenomena of Death.
Bournonville, Aug. C. H.	Pennsylvania.	Tetanus.
Boutelle, Nathaniel R.	Maine.	Cynanche Trachealis.
Briceland, J. Milton	Virginia.	Pleuritis.
Briggs, Henry C.	Virginia.	Intermittent Fever.
Brown, Marcus A.	Ohio.	Present Spirit of Medical Inquiry.
Burton, John J.	Virginia.	Hysteria.
Byers, William J.	Pennsylvania.	Acute Hepatitis.
Carter, John	Virginia.	Fractures.
Chambers, William H.	Virginia.	Urethritis.
Chapman, Charles G.	Connecticut.	Jaundice.
Clapp, William A.	Indiana.	Scrofula.
Clarke, John E.	North Carolina.	Dysentery.
Clary, Charles S	Kentucky.	Congestive Fever.
Cobb, Benjamin F.	North Carolina.	Placenta Prævia.
Cobb, Henry	Virginia.	The Atmosphere.
Coleman, James W.	Virginia.	Purpura.
Craige, Thomas W.	Pennsylvania.	Treatment of Variola.
Curtis, Levi	Connecticut.	Human Reproduction.
Dawson, John	East Indies.	Philosophy of Medicine.
De Hart, John N. E.	Louisiana.	Gonorrhœa.
Derr, Rufus M.	Virginia.	Scrofula.
Dillard, Peter H.	North Carolina.	Intermittent Fever.
Dowell, Greensville	Tennessee.	The Blood.
Dubois, John Treon	Ohio.	Malaria of the Miami Valley.
Eastman, Henry	New Hampshire.	Causes influencing the Action of Therapeutic Agents.
Edwards, James	Pennsylvania.	Inflammation.
Eichelberger, Lewis S.	Virginia.	Pneumonia.
Eliason, Talcott	Virginia.	Coxalgia.
Few, Samuel F.	Virginia.	Phenomena of Labour.
Flippen, Marion J.	Virginia.	Atonic Dyspepsia.
Floyd, James B.	Virginia.	Acute Peritonitis.

Name:	State.	Subject of Thesis.
Folsom, Lewis A.	Georgia.	Intermittent Fever.
Foulke, George W.	Pennsylvania.	Diagnosis of Typhoid Fever.
Franklin, George A.	Maryland.	Intermittent Fever.
Fuller, Smith	Pennsylvania.	Gastritis.
Funkhouser, David	Virginia.	Delirium Tremens.
Gaines, James S.	Tennessee.	Hysteria.
Garlick, John W.	Virginia.	Anasarca.
Gayle, Charles M. S.	Virginia.	Phlegmasia Dolens.
Geiger, Henry	Pennsylvania.	Vis Medicatrix Naturæ.
Gibbon, Robert	North Carolina.	Uterine Hemorrhage.
Glassell, Albert S.	Virginia.	Causes and Treatment of Intermittent Fever.
Glentworth, William W.	Pennsylvania.	Modus Operandi of Medicines.
Gosweiler, Martin H.	Pennsylvania.	Acute Rheumatism.
Hackett, Thomas	Maryland.	Erysipelas.
Hancock, Francis W.	Virginia.	Pneumonia.
Harry, Benjamin F.	Pennsylvania.	Bilious Remittent Fever, as it prevailed in Franklin co., Pa.
Hawkins, Alexander B.	North Carolina.	Gastro-enteritis.
Hilbish, Daniel J.	Pennsylvania.	Erysipelas.
Hogg, Thomas D.	North Carolina.	Iritis.
Hollinsworth, Joseph	North Carolina.	Bilious Remittent Fever.
Hough, De Witt C.	Pennsylvania.	Symplocarpus Fœtidus.
Hunton, George W.	Virginia.	Rubeola.
Hupp, John C.	Pennsylvania.	Traumatic Hemorrhage.
Hutcheson, Thomas D.	Georgia.	Scarlatina.
Irwin, Crawford	Pennsylvania.	Iodine.
Jackson, Isaac	Pennsylvania.	Scarlatina.
Jackson, James C.	New Hampshire.	Progress of Early Medical Science.
Jameson, Samuel D. M.	Maryland.	Goître.
Joy, Horatio N.	New York.	Pneumonia.
Keeney, Jackson P.	Pennsylvania.	Influence of Cold.
Kerr, John G.	Ohio.	Reflex Functions of the Spinal Cord.
Kilby, John T.	Virginia.	Dyspepsia.
Kincaid, John	South Carolina.	Modus Operandi of Nervines.
Kurtz, William J.	Virginia.	Intermittent Fever.
Lamb, William D.	Massachusetts.	Physical Diagnosis of Pneumonia and Pleuritis.
Lewis, Joseph Addison	Missouri.	Puerperal Peritonitis.
Lindsay, Horace F.	North Carolina.	Remittent Fever.
Linn, Alexander E.	Pennsylvania.	Vaccinia.
Locke, Samuel T.	New Jersey.	Is Phthisis contagious?
Lyon, Emory	Massachusetts.	Rubeola.
M'Chesney, William S.	Virginia.	Mania à Potu.
M'Clenahan, Thomas J.	Maryland.	Lithuria.
M'Cullough, Thomas P.	Ohio.	Bilious Remittent Fever.
M'Ferran, Joseph A.	Delaware.	Intermittent Fever.
M'Guigan, William W.	Pennsylvania.	Differential Diagnosis of Typhoid and Typhus Fever.
M'Kenney, Jackson L.	Virginia.	Acute Hepatitis.
Marshall, John H. T.	Maryland.	Dyspepsia.
Marshall, William	Delaware.	Emetics.

Name.	State.	Subject of Thesis.
Martin George	Virginia.	Electro-negative Bodies.
Meeteer, William H.	Delaware.	Relation between Pulmonary and Cardiac Disease.
Mehard, Samuel S.	Pennsylvania.	Croup.
Miller, James L.	South Carolina.	Insanity.
Miller, Langdon	Mississippi.	Typhoid Fever.
Millner, Jesse L.	Virginia.	Iodine and its Medicinal Properties.
Moore, Bird	Tennessee.	Intermittent Fever.
Moore, John R.	Virginia.	Phrenitis.
Murdoch, Andrew C.	Ireland.	Signs of Pregnancy.
Neff, Benjamin	Ohio.	Rational Medicine.
Nisbet, John T.	Georgia.	Cynanche Trachealis.
O'Farrell, Henry T.	New York.	Influence of the Mind upon the Body.
O'Rorke, James	Pennsylvania.	Dyspepsia.
Patterson, Ashmore P.	Pennsylvania.	Study and Practice of Medicine.
Patterson, Robert M.	Georgia.	Delirium Tremens.
Patton, Thomas	Virginia.	Mineral Springs of Western Virginia.
Pendleton, Samuel H.	North Carolina.	Theses.
Perkins, W. Charles	Delaware.	Scarlatina.
Polk, Thomas G.	Tennessee.	Lithotomy.
Pratt, Bryce M.	Virginia.	Scarlatina.
Quinby, Watson F.	Delaware.	Heat and Motion.
Reading, John R.	Pennsylvania.	Influence of the Uterus over the Female Economy.
Reed, Joseph A.	Pennsylvania.	Pneumonia.
Reid, John	Canada West.	Spontaneous Aneurism.
Richardson, John	Pennsylvania.	Typhoid Fever.
Riely, John D.	Virginia.	Uterine Hemorrhage.
Rochelle, John R.	Virginia.	Intermittent Fever.
Rouanet, William P.	Louisiana.	Typhoid Fever.
Royer, B. Franklin,	Pennsylvania.	Traumatic Hemorrhage.
Russell, William A.	Tennessee.	Morbus Brightii.
Rutter, John R. Barton	Pennsylvania.	Acute Pleuritis.
St. Clair, Thomas	Pennsylvania.	Dysentery.
Scott, Isaac	Virginia.	Acute Dysentery.
Scroggs, Andrew A. Jr.	North Carolina.	Calorification.
Shelmerdine, Robert Q.	Pennsylvania.	Neuralgia.
Sinex, William G.	Indiana.	Hemorrhage.
Smith, Elias Ely	Pennsylvania.	Icterus.
Smith, James Dickson	Georgia.	Mutual Relation between the Cardiac and Pulmonary Organs.
Smith, Robert M.	Georgia.	Tetanus.
Spears, Thomas M.	Virginia.	Acute Peritonitis.
Spencer, James L.	Virginia.	The Urine.
Stark, Horatio	Mississippi.	Progress of Medicine.
Starry, John D.	Virginia.	Scarlet Fever.
Stephenson, Robert G.	Pennsylvania.	Intermittent Fever.
Steptoe, Henry C.	Virginia.	Typhoid Fever.
Stith, Robert A.	Virginia.	Delirium Tremens.
Stokes, Josiah H.	South Carolina.	Gonorrhœa.
Stout, Daniel M.	New Jersey.	Epilepsy.

Name.	State.	Subject of Thesis.
Strong, John M.	South Carolina.	Quinia a Sedative.
Sudler, William J.	Maryland.	Congestive Remittent Fever.
Thom, Allan C.	Virginia.	Uterine Hemorrhage.
Tingley, William H.	Pennsylvania.	Traumatic Hemorrhage.
Tinsley, Thomas	Virginia.	Congestive Remittent Fever.
Torrey, Noah	Massachusetts.	Phthisis Pulmonalis.
Trafton, Charles T.	Maine.	Hepatitis.
Trammell, Appling D.	Alabama.	Sthenic Hyperæmia.
Trenchard, J. Franklin	New Jersey.	Vis Medicatrix Naturæ.
Turner, Thomas H.	North Carolina.	Theses.
Turpin, Thomas J.	Virginia.	Scarlatina.
Van Buskirk, William A.	Pennsylvania.	Cholera Infantum.
Van Valzah, Thomas	Pennsylvania.	Puerperal Convulsions.
Van Voorhis, John S.	Pennsylvania.	Peculiarities of the Female System.
Walker, Calvin H.	Tennessee.	Typhoid Fever.
Walling, Willoughby	Kentucky.	Erysipelas.
Wallop, William J. H.	Virginia.	Acute Rheumatism.
Ward, Isaiah	Pennsylvania.	Luxations.
Wathen, Athanasius	Indiana.	Acute Gastritis.
Watkins, Henry A.	Virginia.	Therapeutical Properties and Applications of Mercury.
Watson, Edward H.	Pennsylvania.	Granular Degeneration of the Kidney.
Weaver, John	Pennsylvania.	Psychology in its relations to Medicine.
Wentworth, George W.	New Hampshire.	Inflammation.
Wheeler, Claudius B.	North Carolina.	Fermented Liquors and Tobacco.
Wheet, Thomas	New Hampshire.	Anchylosis.
Whiteside, Philip S. P.	Pennsylvania.	Intermittent Fever.
Wiley, George	New Jersey.	Apoplexy.
Williams, Elisha	North Carolina.	Acute Laryngitis.
Williams, George M.	Georgia.	Diagnosis of Scarlatina.
Williams, James	Tennessee.	Physiological Effects of Cold Water.
Williams, Willis A.	Virginia.	Urethritis.
Willkings, William C.	North Carolina.	Scarlatina.
Willson, Richard T.	Virginia.	Diatheses of Gout, Rheumatism and Urinary Calculi.
Wilson, James R.	Tennessee.	Circulation of the Blood.
Wimley, George W.	Pennsylvania.	Variola.
Wortham, Robert T.	Virginia.	Circulation.
Yates, La Fayette	Kentucky.	Syphilis and Gonorrhœa.
Yerkes, Harman	Pennsylvania.	Influence of Civil Life on Health.

The degree of Doctor of Medicine was also conferred on Benjamin F. Keene of Georgia, and Abraham H. Baker, of Ohio; and the *ad eundem* degree of Doctor of Medicine on Robert C. Martin, M. D., of North Carolina, and William J. Weaver, M. D, of Indiana.

Number of Graduates, 181.

Number of Students, session 1846–47,—493.

ROBERT M. HUSTON, M. D.,
Dean of the Faculty,
No. 1, Girard Street.

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